

**EPA REGISTRATION NUMBER 42750-106 – VOL. 1**



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505C)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

42750-106

Date of Issuance:

DEC 14 2005

NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Acetochlor 4.3 + ATZ 1.7

Name and Address of Registrant (include ZIP Code):

Albaugh, Inc  
P.O. Box 2127  
Valdosta, GA 31604-2127

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit the results of the one year storage stability (830.6317) and corrosion characteristics (830.6320) studies once they are available.
2. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
3. Make the labeling changes listed below before you release the product for shipment:
  - a. Add the phrase "EPA Registration No. 42750-106"

Signature of Approving Official:

*James A. Tompkins*  
James A. Tompkins, Product Manager (25)  
Herbicide Branch, Registration Division (7505C)

Date:

12/14/05

b. Add the statement "Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals." to your Precautionary Statements, Hazards to Humans and Domestic Animals.

c. On page 5, seventh paragraph revise "con-tact" to read "contact".

d. In your Limit of Warranty and Liability revise the third paragraph to read **"To the fullest extent permitted by law,** buyers and all users are responsible for all loss or damage ...

e. In your Limit of Warranty and Liability revise the last sentence in the fifth paragraph to read **"To the fullest extent permitted by law,** in no event shall this company or any other seller...

4. Submit one (1) copy of your final printed label before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6 (e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Enclosure



### RESTRICTED USE PESTICIDE

due to ground and surface water concerns and oncogenicity concerns. For retail sale to and use only by Certified Applicators, or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

### ACETOCHLOR 4.3 + ATZ 1.7

Preemergence herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn and Popcorn.

#### ACTIVE INGREDIENTS:

Acetochlor, 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide .....	46.3%
Atrazine, 2-chloro-4-(ethylamino)-6-(isopropylamino)s-triazine and related triazines .....	18.3%
OTHER INGREDIENTS .....	35.4%
TOTAL: .....	100.0%

\*Contains 516 grams/litre or 4.3 pounds/gallon of acetochlor and 204 grams/liter or 1.7 pounds/gallon of atrazine and related compounds.

KEEP OUT OF REACH OF CHILDREN

#### CAUTION

#### FIRST AID

IF IN EYES	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"><li>• Take off contaminated clothing</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a Poison Control center or doctor for treatment advice.</li><li>• Sensitized persons should avoid further contact and reuse of contaminated clothing.</li></ul>
IF SWALLOWED	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>

Have the product container label with you when calling a poison control center or doctor, or going for treatment.

In case of an emergency involving this product, call CHEMTREC at 1-800-424-9300

EPA Reg. No. 42750-xx  
NET CONTENTS:

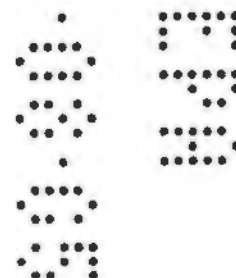
EPA Est. No. 42750-MQ-001

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

DEC 14 2005

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
42750-106

Manufactured For:  
ALBAUGH, INC.  
ANKENY, IA 50021





## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

CAUTION. HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION. Avoid contact with skin, eyes, or clothing.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Mixers, Loaders, Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants
2. Chemical resistant gloves such as polyethylene or polyvinyl chloride,
3. Shoes plus socks,
4. Chemical-resistant apron when mixing/loading, cleaning up spills, or otherwise exposed to the concentrate.

Mixers, Loaders, applicators and other handlers using Engineering Controls must wear:

1. Long-sleeved shirt and long pants
2. Chemical resistant apron for mixers and loaders
3. Shoes plus socks

See engineering controls for additional requirements.

### ENGINEERING CONTROLS

When handlers use closed systems, enclosed cabs, in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

IMPORTANT: When reduced PPE is worn because of an enclosed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

### USER SAFETY RECOMMENDATIONS

Users should:

1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these

soils are very permeable, i.e. well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

See Use Restrictions and Tile-Terraced Fields sections for additional specific information.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Read the entire label before using this product. Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. ALBAUGH DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be assessed through [www.atrazine-watershed.info](http://www.atrazine-watershed.info) or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Albaugh, Inc. for a refund.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, are:

1. Coveralls
2. Chemical resistant gloves made of any waterproof material and
3. Shoes plus socks.

#### STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Keep container closed to prevent spills or contamination.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that can-not be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

CONTAINER DISPOSAL: Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.  
(See the individual container label for disposal information.)

*[alternate language for refillable/mini bulk or bulk containers]*

Instructions for Users: When the container is empty, replace the cap and seal all openings that have been made during usage, and return the container to the point of purchase, or to an alternate location designated by the registrant at the time of purchase of this product. If not returned to the point of purchase or a designated location, triple rinse or pressure wash the empty container and offer it for recycling if available. If not refilled or recycled, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Instructions for Users and Refillers: This container may be refilled only with this pesticide product. Do not reuse this container for any other purpose. Do not transport if this container is damaged or leaking. If the container is damaged or leaking or obsolete, or to obtain information about recycling refillable containers, contact Albaugh Customer Service. Cleaning is not necessary prior to compliance with state and local recommendations.

*[alternate language for plastic 1-way containers]*

Do not reuse container. Triple rinse container, then puncture and dispose of in sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

*[alternate language for drums]*

Do not reuse container. Return container per the Albaugh container return program. If not returned, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.



## GENERAL INFORMATION

This product is recommended for control of yellow nutsedge and many annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. This product alone will not control emerged seedlings. This product may be applied either as a surface application before or after planting, or after crop emergence. This product may also be shallowly incorporated prior to planting to blend the herbicide treatment into the upper 1 to 2 inches of soil. Except for minimum or conservation tillage systems, the seedbed should be fine, firm and free of clods and trash.

Read and carefully observe cautionary statements and all other information appearing on the labeling of all products used in mixtures and sequential treatments. Use according to the most restrictive label directions in the mixture.

NOTE: Use this product for weed control in corn only. CORN, (ALL TYPES INCLUDING SWEET CORN), MILO (SORGHUM), OR SOYBEANS CAN BE PLANTED THE YEAR FOLLOWING THE USE OF THIS PRODUCT. IF SOYBEANS ARE TO BE PLANTED THE FOLLOWING YEAR, THERE IS THE POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE.

## USE RESTRICTIONS

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination. Do not apply to the following soils where depth to ground water is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter; or sandy loams with less than 1 percent organic matter.

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e. well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied within 66 feet of all points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or set-back from runoff points must be planted to a crop or seeded with grass or other suitable crop.

This product may not be mixed or loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110 percent of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100 percent of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

States may have in effect additional requirements regarding wellhead setbacks and operational

containment.

Do not flood irrigate to apply or incorporate this product.

Product must be used in a manner which will prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Do not apply this product through any type of irrigation system.

Disposal of excess pesticide, spray mixtures or rinsate should be according to label use instructions or according to the state Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional office.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:

Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered soils.

Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rain-fall has occurred between application and the first irrigation.

Do not apply this product using aerial application equipment.

Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:

Use low pressure application equipment capable of producing a large droplet spray. Do not use nozzles that produce a fine droplet spray. Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.

Keep ground driven spray boom as low as possible above the target surface.

Make application when the wind velocity favors on-target product deposition (approximately 3-10 miles per hour). Do not apply when wind velocity exceeds 15 miles per hour. Avoid application when gusts approach 15 miles per hour.

Low humidity arid high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

Use of this product not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

For field corn forage use, allow 60-day preharvest interval.

Flush sprayer with clean water after use.

Do not rotate to crops other than soybeans, corn, milo (sorghum), wheat, or tobacco.

The maximum atrazine broadcast application rate for corn:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient



per acre broadcast. If a postemergence treatment is required following an earlier herbicide application, the total triazine applied may not exceed 2.5 pounds active ingredient per acre per calendar year.

- Apply a maximum of 2.0 pounds of active ingredient per acre as a single preemergence application on soils that are not highly erodible or on highly erodible (as defined by the Natural Resources Conservation Service) if at least 30 percent of the soil is covered with plant residues; or
- Apply a maximum of 1.6 pounds active ingredient per acre as a single preemergence application on highly erodible soils (as defined by the Natural Resources Conservation Service) if <30 percent of the surface is covered with plant residue; or 2.0 pounds active ingredient per acre if only applied post emergence.

When tank mixing or sequentially applying, atrazine or products containing atrazine to corn, the total pounds atrazine applied (pounds active ingredient per acre) must not exceed 2.5 pounds active ingredient per acre.

#### Tile-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options must be used:

1. Do not apply this product within 66 feet of standpipes in the tile-outletted fields.
2. Apply this product to the entire tile-outletted field and immediately incorporate it to a depth of 2 to 3 inches in the entire tile-outletted field.
3. Apply this product to the entire tile-outletted field under a no-till practice only when a high crop residue management practice is used. High crop residue management practice is described as a crop management practice where little or no crop residue is removed from the field during or after crop harvest.

#### SOIL TEXTURE

Applicators should evaluate soil conditions carefully to assure that they choose the correct label rate. The recommended use rates of this product and the other herbicides labeled for use in tank mixtures with this product vary with soil texture. Unless soil texture is specifically named, rate tables through-out this label refer to only three soil textural groups: coarse, medium and fine. The following is a complete listing of soil textures included in each of these three soil textural groups:

SOIL TEXTURAL GROUP	SOIL TEXTURE
COARSE:	sand, loamy sand, sandy loam
MEDIUM:	loam, silt loam, silt, sandy clay loam
FINE:	silty clay loam, clay loam, sandy clay, silty clay, clay

Refer to the above table to determine the corresponding soil textural group for the soil to be treated.

#### MIXING, SPRAYING AND HANDLING INSTRUCTIONS

NOTE: Direct contact or exposure to this product or spray mixtures of this product should be minimized. The following instructions for transfer, mixing, cleaning or repairing equipment should be followed in order to minimize this exposure. Review the protective clothing requirements as listed in the "PRECAUTIONARY STATEMENTS" section of this label (front panel) and do not use this product until you have the necessary protective clothing.

#### 2.5 Gallon Containers

Open pouring from these containers can result in exposure from splashing or spilling. Special care in lifting and pouring are strongly recommended.



## Bulk Containers

Open pouring from these containers can result in exposure from splashing or spilling and is not recommended. This product should be transferred from these containers to the mix or spray tank using pumps or transfer probes. The probe or pump should not be removed from the container or disconnected until the container is emptied and rinsed. Use the pump or probe system to rinse the empty container and transfer the rinsate directly to the mix or spray tank.

## EQUIPMENT CLEANING & REPAIR

Cleaning and repair of transfer systems and application equipment is a source of exposure to this product. Care should be taken to minimize exposure during cleaning and repair of transfer systems and application equipment. Whenever possible, these systems or equipment should be rinsed before being cleaned or repaired.

When repairs must be made during transfer or application, the equipment should be shut down, and special care taken to avoid contact with the pesticide.

## SPRAYER COMPATIBILITY

Always predetermine the compatibility of this product or labeled tank mixtures of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the "STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST" section in this label to determine the compatibility of this product and the labeled tank mixtures recommended for use with sprayable fluid fertilizer carrier.

Mix this product or labeled tank mixture of this product with the appropriate carrier as follows:

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the sprayer tank one-half full with the appropriate carrier.
3. If a compatibility agent is necessary to improve mixing or to pre-vent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only compatibility agents cleared by FDA for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent label. Check for adequate agitation.
4. If a wettable powder or dry flowable formulation is used, make a slurry with water and add it slowly through the screen into the tank. Continue agitation.
5. If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when flow-able is pre-mixed one part flowable with one part water and added to the tank in diluted form.
6. Add this product slowly through the screen into the tank. Mixing and compatibility maybe improved when this product is prediluted with two parts of water and added to the tank in diluted form.
7. Complete filling the sprayer tank with carrier. If a Roundup<sup>®</sup> agricultural herbicide or Gramoxone<sup>®</sup> Extra is used, add the required amount near the end of the filling process. Remove hose from tank immediately after filling to avoid siphoning back into the carrier source.

Maintain good agitation at all times until the contents of the tank are sprayed.

NOTE: If spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers

should be 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. Check for even distribution of spray droplets. To reduce loss of the chemical due to drift of a fine mist, apply at nozzle pressures below 40 psi.

#### STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

Herbicides may not always mix evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This maybe due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential. The test follows:

##### A. Materials Required For A Compatibility Test

1. Two one-quart jars with lid or stopper (marked "with" and "with-out").
2. TEAspoons (for a more exacting test, a five to ten milliliter (rel.) pipette or graduated cylinder is desirable).
3. Sprayable fluid fertilizer to be tested.
4. The herbicide chemicals to be mixed.
5. A compatibility agent (the purpose of the adjuvant is to help keep the fertilizer and crop protection chemical in suspension, if this assistance is needed).

##### B. Procedure

1. Add one pint of the sprayable fluid fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".

Add One Pint Liquid Fertilizer To Two Quart Jars.	
WITH	WITHOUT

2. To the jar marked "with", add 1/4 TEAspoon or 1.2 milliliters of a suitable compatibility agent; shake gently for five to ten seconds to mix. (1/4 Teaspoon in one pint is the equivalent of two pints per 100 gallons of liquid fertilizer.)

To jar marked "With" Add Compatibility Agent and Shake to Mix	
WITH	WITHOUT

3. To each jar add the appropriate amount of herbicide(s). If more than one is used, add them separately with the wettable powders or dry flowables added first, flowables second and liquid last. Shake gently five to ten seconds after each addition.

Add Herbicide(s) To Both Jars And Shake to Mix.	
WITH	WITHOUT

			Amount to Be Added Per Pint of Sprayable Fluid Fertilizer (Assuming Volume is 25 gal/A)
HERBICIDE	RATE/Acre		Level TEAspoons
Wettable Powders	1 pound	=	1.5
	2 pounds	=	3.0
Or	3 pounds	=	4.5
	4 pounds	=	6.0
Dry Flowables	5 pounds	=	7.5

HERBICIDE	RATE/Acre		Level TEAspoons		Milliliters
Emulsifiable Concentrates	1 pint	=	0.5	or	2.4
Or	1 quart	=	1.0	or	4.7
Flowables	2 quarts	=	2.0	or	9.5
Or	3 quarts	=	3.0	or	14.2
Liquids	1 gallon	=	4.0	or	19.0
Or	5 quarts	=	5.0	or	23.8
Solutions					

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide rate, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 TEAspoon or 1.2 milliliters, three pints = 3/8 TEAspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer

### C. Observations and Decisions

1. If the herbicide(s) and the sprayable fluid fertilizer are compatible.
2. If a compatibility agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge, gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicide(s) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. An emulsifiable concentrate normally will go to the top after standing; wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the herbicide(s) is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the premixing. If it is not compatible without the compatibility agent, the herbicide(s) should be premixed with water before adding to the spray tank.



## APPLICATION SYSTEMS

### GROUND BROADCAST TREATMENT

Apply this product and the labeled tank mixtures in 10 or more gallons of solution per acre using broadcast boom equipment. The carrier may be either water or sprayable fluid fertilizer as specified for the crop to be treated in the "DIRECTIONS FOR USE" section of this label. Do not apply during periods of gusty winds, when winds are in excess of 15 miles per hour or when other conditions favoring drift exist

### GROUND BAND TREATMENT

Apply a broadcast equivalent rate and volume per acre. To determine these:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast RATE per Acre} = \text{Band RATE per Acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast VOLUME per acre} = \text{Band VOLUME per acre}$$

### APPLICATION WITH DRY BULK FERTILIZER

The herbicide-fertilizer impregnation process (In-Plant and On-Board systems) must be completed only by commercial fertilizer or chemical dealerships properly equipped for this procedure. Contact Albaugh, Inc. Company for additional information regarding recommended equipment and methods for herbicide-fertilizer impregnation applications.

Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product plus atrazine on corn. This product and these tank mixtures must be applied with 200 to 450 pounds of dry bulk fertilizer per acre and shallowly incorporated within 14 days prior to planting. On medium and fine-textured soils in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional tillage situations, applications can be made up to 30 days before planting to allow moisture to move the herbicide-fertilizer mixture into the soil. On coarse-textured soils, applications can be made up to 14 days prior to planting. The herbicide must be applied as recommended in this label for the crop, weed and soil type treated. Refer to the table for broadcast rate per acre to determine the recommended rate per acre for the herbicide treatment to be applied.

Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited. No more than 500 tons of bulk fertilizer can be impregnated per day. No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.

The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the use (applicator) of the dry bulk fertilizer that:

- Applicators must wear long-sleeved shirt, long pants, shoes and socks.
- Do not enter or allow others to enter the treated areas (except those involved in the watering) until the watering-in is complete and the surface is dry.

The following table provides a reference to determine the amount of LIQUID herbicide to be mixed per ton of dry bulk fertilizer for a range of herbicide recommendations for fertilizer rates per acre:

Fertilizer Rate (pounds/Acre)	Acres Covered (per ton)	RECOMMENDED QUARTS OF LIQUID HERBICIDE/ACRE (quarts of herbicide/Ton Dry Bulk Fertilizer)		
		(1.5)	(1.8)	(2.3)
200	10.0	15.0	18.0	23.0
250	8.0	12.0	14.4	18.6
300	6.7	10.1	12.1	15.5
350	5.7	8.6	10.2	13.3
400	5.0	7.5	9.0	11.7
450	4.5	6.8	8.1	10.4

To determine the amount of herbicide needed for rates not included in the preceding table, use the following formula:

Recommended Herbicide Rate

$$\frac{\text{Quarts/Acre} \times 2000}{\text{Pounds Fertilizer/Acre}} = \text{Quarts of herbicide per ton of dry bulk fertilizer}$$

With the In-Plant system, mix and blend the dry fertilizer and herbicide mixture in a closed rotary-drum type mixture allowing sufficient time to ensure uniform coverage. Use at least one ton of dry fertilizer per mixing operation. Inject the herbicide into the drum over a minimum of a 2-minute period and allow at least 2 additional minutes mixing time to ensure uniformity. The nozzle used to spray the herbicide treatment must be placed inside the mixer to provide uniform spray coverage of the tumbling fertilizer.

If the dry fertilizer used has inadequate absorptive capacity, use a higher absorptive material such as Agsorb, MP-79 or Micro-cel E, to provide a free-flowing mixture. Contact Albaugh, Inc. for specific guidelines with regard to the sequence of addition for the various components and the amount of drying agent to add to provide a free-flowing mixture.

The following table provides a partial list of dry fertilizers which may be impregnated with this product.

Ammonium sulfate	21-00-00
Ammonium phosphate-sulfate	16-20-00
Diammonium phosphate	18-46-00
Potassium chloride	00-00-60
Potassium sulfate	00-00-52
*Urea	46-00-00

\*Some ureas may be phytotoxic when applied on corn. Use only ureas known to be safe to corn.

NOTE: DO NOT impregnate this product or tank mixtures of this product with other herbicides on fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate.

Spread the herbicide-dry fertilizer mixture uniformly with a properly calibrated applicator: dribble, pneumatic (air flow) or spin. When using spin applicators, fertilizers impregnated with this product or tank mixtures of this product with other herbicides must be spread at half-rate and overlapped 1130 percent to obtain full rate and uniform distribution. Non-uniform spreading of the fertilizer-herbicide mixture may result in unsatisfactory weed control or crop injury.

## APPLICATION TIMING AND METHODS

NOTE: The maximum total per crop season of this product is 2.7 quarts.

### Early Preplant Surface Application

This product and some labeled tank mixtures of this product maybe applied in no-till and other conservation tillage systems before weeds emerge and up to 45 days before planting field corn or silage corn. Split applications can be made 30 to 45 days prior to planting with 60 percent of the recommended broad-cast rate applied initially and the remaining 40 percent applied at planting. Applications made less than 30 days prior to planting can be made either as a split or as a single application. If weeds are present at the time of application, apply this product in tank mixture with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

### Preplant Incorporation Application

This product and many of the labeled tank mixtures may be mixed into the soil using shallow incorporation equipment any time within 14 days prior to planting. Apply the recommended treatment rate to the soil surface as a broadcast application. Either existing soil moisture or subsequent precipitation or irrigation is required to bring incorporated herbicide treatments into contact with germinating weed seedlings. If weeds emerge after treatment, rotary hoe or shallowly cultivate immediately to improve performance.

Shallowly incorporate the treatment into the upper 1 to 2 inches of the soil. Equipment should be operated at manufacturer's designed speed for incorporation to ensure adequate mixing and distribution of the herbicide treatment in the soil. Equipment design including any drag attachments must be adequate to avoid soil ridging which may result in streaked or reduced weed control. Soil conditions, including moisture content and crop residue levels, must be suitable to allow thorough and uniform mixing with the equipment used for 1-pass incorporation.

### Preemergence Surface Application

This product and all labeled tank mixtures may be applied to the soil surface after planting and prior to either crop or weed emergence. Apply within 5 days of last preplant tillage. If weeds emerge after treatment, or if treatment is applied more than 5 days after last preplant tillage, rotary hoe or shallowly cultivate immediately to improve performance. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone. The amount of precipitation or overhead sprinkler irrigation required depends on existing soil mixture, soil type and percent organic matter content, but 1/3 to 3/4 inch is normally adequate. Performance is improved when moisture is received within 7 days after application and prior to weed emergence. High intensity or excessive rainfall or excessive irrigation after application may reduce control.

### Postemergence Surface Application

This product and certain tank-mixtures may be applied postemergence until corn reaches 11 inches in height. Application must be made prior to the 2-leaf grass stage or in a tank-mixture that controls emerged weeds. Read and follow all restrictions and directions on tank-mix product labels. Refer to the specific treatment intended in the "DIRECTIONS FOR USE" section of the label to determine if postemergence applications to corn are recommended and determine the proper weed and corn growth stage limitations. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone to control unemerged weeds. The amount of precipitation or irrigation required depends on existing soil moisture, soil type and percent organic matter



content, but 1/4 to 3/4 inch is normally adequate. If weeds emerge after treatment, rotary hoe or shallowly cultivate to improve performance.

DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

#### CULTIVATION INFORMATION

Delay cultivation after application for as long as possible unless weeds or grasses emerge. Shallowly cultivate or rotary hoe immediately if weeds or grasses emerge. If cultivation is necessary because of soil crusting or compaction, set equipment shallow and minimize lateral soil movement to avoid dilution or displacement of the herbicide treatment. If a band application is used and weeds have emerged in the treated band, set cultivator to throw soil into the row covering the band.

#### WEEDS CONTROLLED

When applied as directed under conditions described, this product will CONTROL the following weeds:

##### ANNUAL GRASSES CONTROLLED

Barnyardgrass  
*Echinochloa crus-galli*

Crabgrass  
*Digitaria ischaemum*  
*Digitaria sanguinalis*

Cupgrass, woolly\*  
*Eriochloa villosa*

Foxtail, giant  
*Setaria faberi*

Foxtail: green, robust purple, robust white  
*Setaria viridis*

Foxtail, yellow  
*Setaria lutescens*

Goosegrass  
*Eleusine indica*

Oat, wild  
*Avena fatua*

Panicum, browntop  
*Panicum fasciculatum*

Panicum, fall  
*Panicum dichotomiflorum*

Rice, red  
*Oryza sativa*

Signalgrass, broadleaf  
*Brachiaria platyphylla*

Sprangletop, red  
*Leptochloa fiiliformis*

Wheat, volunteer  
*Triticum aestivum*

Witchgrass  
*Panicum capillare*

\* Apply 2.7 quarts of this product per acre to control this weed. Control of these weeds can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA registered postemergence herbicide.

#### ANNUAL BROADLEAVES CONTROLLED

Beggarweed, Florida  
*Desmodium tortuosum*

Carpetweed  
*Mollugo verticillata*

Cocklebur\*  
*Xanthium strumarium*

Galinsoga  
*Galinsoga spp.*

Groundcherry, annual  
*Physalis spp.*

Groundcherry, cutleaf  
*Physalis angulata*

Henbit  
*Lamium amplexicaule*

Jimsonweed  
*Datura stramonium*

Kochia\*\*  
*Kochia scoparia*

Lambsquarters  
*Chenopodium album*

Morningglory, annual\*  
*Ipomoea purpurea*

Mustard  
*Brassica spp.*

Nightshade, black  
*Solanum nigrum*

Nightshade, hairy  
*Solanum sarrachoides*

Pigweed, Carelessweed  
*Amaranthus spp.*

Purslane  
*Portulaca oleracea*

Pusley, Florida  
*Richardia scabra*

Ragweed, common  
*Ambrosia artemisiifolia*

Sida, prickly; Teaweed  
*Sida spinosa*

Smartweed  
*Polygonum pensylvanicum*  
*Polygonum persicaria*

Velvetleaf, Buttonweed\*  
*Abutilon theophrasti*

Waterhemp  
*Amaranthus tuberculatus*

\* Use the higher rate in the recommended rate range. Control of these weeds can be erratic especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide.

\*\* Triazine-resistant biotypes may require a post sequential application of a non-triazine herbicide for control.

## SEDGE

Nutsedge, yellow\*  
*Cyperus esculentus*

\*Preplant incorporate for control.

## ANNUAL GRASSES PARTIALLY CONTROLLED

When applied immediately after planting and within 5 days of last tillage, this product at a rate of 2.3 to 2.7 quarts per acre on a broadcast basis will reduce competition from the following HARD-TO-CONTROL weeds.

Johnsongrass, seedling  
*Sorghum halepense*

Millet, proso  
*Panicum millicium*

Panicum, Texas  
*Panicum texanum*

Sandbur, Grassbur  
*Cenchrus incertus*

Shattercane, wildcane  
*Sorghum bicolor*

#### ANNUAL BROADLEAVES PARTIALLY CONTROLLED

Ragweed, giant  
*Ambrosia trifida*

Sicklepod  
*Cassia obtusifolia*

Sunflower, common  
*Helianthus annuus*

NOTE: For hard-to-control weeds, additional amounts of ACETOCHLOR 4.3 + ATZ 1.7 herbicide and/or atrazine may be added to the recommended treatment rates for this product to provide improved control. For more consistent control of common cocklebur, annual morningglory or velvetleaf, additional atrazine may be applied so that the total atrazine rate is at least 1.5 quarts per acre on medium textured soil with less than 3 percent organic matter, and 1.5 to 2 quarts on medium and fine textured soils with 3 percent or greater organic matter content. For more consistent control of woolly cupgrass additional ACETOCHLOR 4.3 + ATZ 1.7 may be applied so that the total acetochlor rate is 3.0 pounds per acre. The following table shows the amounts of ACETOCHLOR 4.3 + ATZ 1.7 herbicide and/or atrazine that can be added to specific treatment rates of this product.

The maximum atrazine broadcast application rates for corn:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient per acre broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds active ingredient per acre per calendar year.
- Apply a maximum of 2.0 pounds active ingredient per acre as a single preemergence application on soils that are not highly erodible or on highly erodible soils (as defined by the Natural Resources Conservation Service) if at least 30 percent of the soil is covered with plant residues, or
- Apply a maximum of 1.6 pounds active ingredient per acre as a single preemergence application on highly erodible soils (as defined by the Natural Resources Conservation Service) if <30 percent of the surface is covered with plant residues; or 2.0 pounds active ingredient per acre if only applied postemergence.

On not use more than 2.7 quarts of this product per acre per calendar year.

RECOMMENDED RATE ACETOCHLOR 4.3 + ATZ 1.7 (quarts)	PRODUCT ADDITION (maximum rate)	
	ACETOCHLOR 4.3 + ATZ 1.7 (pints)	ATRAZINE 4L (quarts)
1.5	1.5	1.4
1.8	1.2	1.3
2.0	0.9	1.2



## CONSERVATION OR MINIMUM TILLAGE SYSTEMS

NOTE: Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications, which are not consistent with recommendations in this label, may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS AND METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

The tank mix recommendations in the Conventional Tillage Section of this label may also be followed when using Conservation or Minimum Tillage Systems. Follow all label precautions, directions and restrictions of tank mix partners.

### At-Planting Applications

When applied as directed under the conditions described, the recommended tank mixtures control many emerged annual weeds, suppress many emerged perennial weeds and give preemergence control of many annual grasses and weeds when corn will be planted directly into a cover crop, established sod or in previous crop residues. These tank mixtures will not control regrowth from perennial weeds.

### DO NOT APPLY BY AIR.

Refer to specific product labels for crop rotation restrictions and precautionary statements of all products used in these tank mixtures. For mixing instructions, see the "MIXING AND SPRAYING INSTRUCTIONS" section of this label.

### Additional Preemergence Control

ACETOCHLOR 4.3 + ATZ 1.7 herbicide may be tank-mixed with Princep and a Roundup agricultural herbicide, Gramoxone Extra and/or 2,4-D.

Apply these tank mixtures with a Roundup agricultural herbicide or 2,4-D (amine or low volatile ester) in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre, or the tank mixtures with Gramoxone Extra in 20 to 60 gallons of water or clear liquid fertilizer per acre immediately before, during or after planting, but BEFORE CROP EMERGENCE. As density of stubble, crop residue or weeds increase, spray gallonage and rate should be increased within the recommended ranges to ensure complete coverage. In the absence of emerged vegetation, delete the Roundup agricultural herbicide, Gramoxone Extra or 2,4-D portion of these tank mixtures.

### Control or Suppression of Emerged Weeds

ATTENTION: AVOID DRIFT-EXTREME CARE MUST BE USED WHEN APPLYING THESE TANK MIXTURES TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS. Do not allow spray mist to drift since even minute quantities of spray can cause severe damage or destruction to nearby crops,

plants or other areas on which treatment is not intended. Do not apply when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.

#### Roundup WeatherMAX™ Herbicide

##### Annual Weeds

Apply Roundup WeatherMAX herbicide, or other glyphosate agricultural herbicides, in these tank mixtures at the proper rate for the weed per the label instructions.

##### Perennial Weeds

At normal application dates in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. Use of 1.3 to 2.7 quarts of Roundup WeatherMAX herbicide per acre, or equivalent rates of other Roundup agricultural herbicides, in the above mixtures under these conditions provides top kill and reduces competition from many emerged perennial grasses and broadleaf weeds.

USE OF THIS MIXTURE FOR BERMUDAGRASS OR JOHNSONGRASS CONTROL IS NOT RECOMMENDED.

NOTE: When using these tank mixtures, do not exceed 2.7 quarts of Roundup WeatherMAX herbicide per acre.

##### Ammonium Sulfate

The addition of ammonium sulfate in the spray solution may increase the performance of Roundup agricultural herbicide tank mixtures on emerged annual weeds under adverse growing conditions. When using ammonium sulfate, add 2 percent dry ammonium sulfate by weight or 17 pounds per 100 gallons of water. Ammonium sulfate should be added to the water in the spray tank and completely dissolved prior to adding the herbicide or surfactant. Do not mix ammonium sulfate in fluid fertilizer solutions. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet lines. Nozzle tip plugging may result from the use of low quality ammonium sulfate. To determine quality, perform a jar test by adding 1/3 cup of ammonium sulfate to 1 gallon of water and agitate for one minute. If undissolved sediment is observed, predissolve the ammonium sulfate in water and filter prior to adding to the spray tank.

##### Surfactants

Nonionic surfactants that are labeled for use with herbicides may be used with some Roundup agricultural herbicides check specific label for restrictions. Do not reduce rates of Roundup agricultural herbicides when adding surfactant. Use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants that contain at least 50 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 50 percent active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

##### Gramoxone Extra

When used as directed, Gramoxone Extra in a labeled tank mixture controls many emerged annual weeds and suppresses many emerged perennial weeds.

### Broadcast Treatment

Apply 1.5 to 3 pints of Gramoxone Extra per acre in the recommended tank mixtures immediately before, during or after planting but BEFORE CROP EMERGENCE. Use 2 to 2.5 pints when weeds are 3 to 6 inches tall. Use 2.5 to 3 pints when weeds are 6 inches tall. This mixture may not control weeds taller than 6 inches. As density of stubble, crop residue or weeds increases, spray gallonage should be increased within the recommended range for complete coverage. Add a nonionic spreader surfactant (approved for use on crops) containing at least 75 percent surfactant active agent at 8 ounces per 100 gallons of diluted spray. REFER TO THE GRAMOXONE EXTRA LABEL FOR PRECAUTIONARY STATEMENTS.

### 2,4-D

When used as directed, 2,4-D in labeled tank mixtures controls many emerged annual and perennial broadleaf weeds. For emerged weeds controlled, see the "WEEDS CONTROLLED" section of the label for 2,4-D.

### Broadcast Treatment

Apply 1 to 2 pints of 2,4-D (amine or low-volatile ester) in the recommended tank mixtures. Applications should be made 7 to 14 days before planting or 3 to 5 days after planting but BEFORE CORN EMERGES. As density of stubble, crop residue or weeds increase, spray gallonage should be increased within the recommended range for complete coverage.

DO NOT use 2,4-D on light, sandy soils, or where soil moisture is inadequate for normal weed growth. Observe all precautions and limitations on the 2,4-D label booklet.

### Early Preplant Application

If emerged weeds are present at the time of treatment, a Roundup agricultural herbicide, Gramoxone Extra or 2,4-D should be added to this product according to the directions for use on their respective product labels. If unsatisfactory weed control occurs (due to excessively dry or excessively wet conditions) following the earlier application, a postemergence application of an appropriate labeled grass and/or broadleaf weed herbicide may be used. If a postemergence treatment includes the herbicide used early preplant, do not exceed the labeled rate for corn on a given soil texture. Observe all precautions and limitations on the labels for ACETOCHLOR 4.3 + ATZ 1.7, Roundup agricultural herbicides, Gramoxone Extra, 2,4-D and other postemergence herbicides before use of these products.

DO NOT apply tank mixtures containing a Roundup agricultural herbicide, Gramoxone Extra or other contact herbicides by air.

### ACETOCHLOR 4.3 + ATZ 1.7

This product, when applied in a single application or split application will provide preemergence controller reduced competition of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. If weeds are emerged at time of application, apply a labeled contact herbicide with this product. Observe the directions for use, precautions and restrictions on the label of the contact herbicide.

### Approved Application Systems

Ground-Broadcast boom  
Dry Bulk Fertilizer Impregnation

Reference: The "APPLICATION SYSTEMS" section of this label provides detailed information on the application of this product using the system selected.

#### Recommended Rate and Timing of Application

##### Single application

Application of this product should be made less than 30 days before planting but prior to weed emergence. On coarse textured soils applications should not be made more than 2 weeks prior to planting.

##### Split application

Apply 60 percent of the recommended rate as a split application prior to weed emergence and no more than 45 days prior to planting and the remaining 40 percent at or immediately following planting but before crop emergence.

See the following table for recommended broadcast rates per acre for single and split applications.

#### APPLICATION RATES

	BROADCAST RATE PER ACRE
SOIL TEXTURAL GROUP	ACETOCHLOR 4.3 + ATZ 1.7 * (quarts)
Coarse	1.8
Medium	2.3
Fine	2.3

\* In areas of heavy weed infestation use up to 2.7 quarts per acre on medium and fine textured soils.

In order to provide broadspectrum weed control, both single and split applications of this product must be followed with a planned postemergence application of a labeled broadleaf and/or grass herbicide. Observe the directions for use, precautions and restrictions on the label of the postemergence herbicide before use of these products.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

##### Sequential application

Application of this product following Princep (See tank-mix section 12.11) should be utilized for the control of fall panicum, crabgrass or broadleaf signal grass. Apply 1 to 1.25 quarts per acre of Princep prior to weed emergence and no more than 45 days prior to planting. At or immediately following planting, but before crop emergence, apply the recommended rate of this product.

Following application of Princep see the following table for recommended rates.

#### APPLICATION RATES

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE
	ACETOCHLOR 4.3 + ATZ 1.7 * (quarts)
Coarse	1.5 to 1.8
Medium	1.8 to 2.3



Fine	1.8 to 2.3
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\* Use the higher rates in the recommended ranges in areas of heavy weed infestation.

When using Princep 90 DF use equivalent rates. One quart of Princep 4L equals 1.1 pounds of Princep 90 DF.

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

#### CONVENTIONAL TILLAGE

NOTE: Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications that are not consistent with recommendations in this label may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where other specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS AND METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

#### ACETOCHLOR 4.3 + ATZ 1.7

Apply this product in water or sprayable fluid fertilizer solution for control of yellow nutsedge and the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

#### Approved Application Systems

Ground-Broadcast boom; banded  
Dry Bulk Fertilizer Impregnation

#### Approved Application Methods

Preplant Incorporated; Preemergence Surface

Postemergence Surface

Add up to 1 pint per acre of 2,4-D as a tank-mix partner to aid in control of existing weeds. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur. Read and follow all labeled directions for use for 2,4-D.

## APPLICATION RATES

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)
Coarse	1.8
Medium	1.8 to 2.3
Fine	2.0 to 2.3

\* In areas of heavy weed infestation use up to 2.7 quarts per acre on medium- and fine-textured soils.

ACETOCHLOR 4.3 + ATZ 1.7 plus Roundup WeatherMAX on Roundup Ready® Corn and Roundup Ready Corn 2

This program may be used preemergence and postemergence to Roundup Ready Corn and Roundup Ready Corn 2 from seedling emergence until the corn reaches 11 inches in height. Refer to the Roundup WeatherMAX or other glyphosate agricultural herbicide labels for specific weeds controlled postemergence.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN THE ROUNDUP READY GENE.

Approved Application Systems  
Ground-Broadcast boom

### Approved Application Methods

#### Preemergence Surface

Sequential Program This product may be applied preemergence to Roundup Ready Corn or roundup Ready Corn 2 at the Roundup Ready Rate of 1.2 quarts per acre in a planned preemergence followed by Roundup agricultural herbicide postemergence sequential program.

#### Postemergence Surface

This product is applied postemergence to Roundup Ready corn from seedling emergence until the corn is 11 inches in height. The Roundup Ready Rate for this product is 1.2 quarts per acre. Labeled use rates for this tank-mix are defined in the table below. Use the higher rate on larger weeds and where heavy weed infestations exist. This tank mix should be applied when weeds are 2 to 4 inches in height and before the weed height and/or density become competitive with the crop.

For difficult to control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signalgrass and Pennsylvania smartweed use the higher rate of Roundup WeatherMAX or equivalent rates of other Roundup agricultural herbicides.

ROUNDUP READY RATE - ACETOCHLOR 4.3 + ATZ 1.7 at 1.2 quarts per acre.

Application Rates (minimum and maximum range)

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7 (quarts)	ROUNDUP WEATHERMAX (ounces)
Coarse	1.0 to 1.8	16 to 22
Medium	1.0 to 2.3	16 to 22
Fine	1.0 to 2.3	16 to 22

ACETOCHLOR 4.3 + ATZ 1.7 plus Accent

Apply this tank mixture in water after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Accent herbicide label for specific weeds controlled postemergence.

Approved Application Systems  
Ground-Broadcast boom; banded

Approved Application Methods

Postemergence Surface-Apply this tank-mixture after corn emergence up to 11 inches in height and until grasses are 3 inches in height. Applications made after grasses exceed 3 inches in height may not provide satisfactory control. Always add a nonionic surfactant at 0.25% v/v. This tank mixture will not control certain emerged broadleaf weeds. Addition of Banvel or Permit® will improve performance on broadleaf weeds. Refer to the Accent herbicide label for specific weeds controlled. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected.

#### APPLICATION RATES

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)	ACCENT** (ounces)
Coarse	1.8	1/2 to 2/3
Medium	1.8 to 2.3	1/2 to 2/3
Fine	2.0 to 2.3	1/2 to 2/3

\*In areas of heavy weed infestation use up to 2.7 quarts per acre on medium- and fine-textured soils.

\*\*The Accent rate may be reduced to 1/3 to 2/3 ounce per acre if grasses are less than 2 inches in height when sprayed.

ACETOCHLOR 4.3 + ATZ 1.7 plus Balance™ PRO

For Use in Field Corn and Silage Corn

Approved Application Systems  
Ground - Broadcast boom; banded.

## Approved Application Method

### Preemergence Surface

Balance PRO is not registered in all states. Follow all Restrictions and Precautions on the Balance PRO label including planting depth, environmental precautions, and soil type restrictions.

Follow the Balance PRO Technical Bulletins, 24(c) labels and 2(ee) recommendations for additional use rate restrictions based on soil textures and depth to groundwater in various states.

### APPLICATION RATES

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE			
	<3% ORGANIC MATTER		3% OR MORE ORGANIC MATTER	
	ACETOCHLOR 4.3 + ATZ 1.7 (quarts)	BALANCE PRO (ounces)	ACETOCHLOR 4.3 + ATZ 1.7 (quarts)	BALANCE PRO (ounces)
COARSE *	1.4 to 1.8	1.0-1.88	1.4 to 1.8	1.0 to 1.88
MEDIUM	1.4 to 2.3	1.00 to 2.50	1.4 to 2.3	1.5 to 3.00
FINE	1.5 to 2.3	1.50 to 2.75	1.5 to 2.3	2.0 to 3.50

\* It is not recommended to use Balance PRO on coarse soils with less than 1.5% organic matter.

ACETOCHLOR 4.3 + ATZ 1.7 plus Banvel or other dicamba agricultural herbicides

For use on level- or flat-planted field corn on soils with more than 2 percent organic matter.

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems  
Ground-Broadcast boom; banded

### Approved Application Methods

#### Preemergence Surface

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1-1/2 inches beneath the soil surface,

For Use on Kochia - Preemergence Surface only - Banvel and Clarity tank mix rates may be reduced to 0.25 to 0.5 pints per acre in soils less than 3% organic matter, or 0.5 pints per acre in soils equal to or greater than 3% organic matter. Follow all label restrictions.

#### Postemergence Surface

Apply this tank-mixture before grasses have reached the 2-leaf stage and the corn is less than 8 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control. Addition of Accent to this tank mixture will improve control of emerged grasses. Some leaf burn to corn



may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow-irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)	BANVEL or CLARITY (pints)
Coarse**	1.8	1
Medium	1.8 to 2.3	1
Fine	2.0 to 2.3	1

\*In areas of heavy weed infestation use up to 2.7 quarts per acre on medium- and fine-textured soils.

\*\*On coarse-textured soils containing 2% or more organic matter, use ACETOCHLOR 4.3 + ATZ 1.7® Xtra plus Banvel only on sandy loam. Do not use on sand and loamy sand with less than 2% organic matter. Refer to the "USE RESTRICTIONS" section of this label for restrictions.

ACETOCHLOR 4.3 + ATZ 1.7 plus Callisto™

For Postemergence Surface Applications for Field Corn, Production Seed Corn and Silage Corn

Approved Application Systems  
Ground-Broadcast boom; banded

#### Approved Application Methods

##### Postemergence Surface

Callisto is not registered in all states. Follow all Restrictions and Precautions on the Callisto label including planting depth, environmental precautions, and soil type restrictions.

#### Application Rates

ACETOCHLOR 4.3 + ATZ 1.7 may be tank mixed with 3 ounces of Callisto for postemergence applications. Use the labeled rates of ACETOCHLOR 4.3 + ATZ 1.7 that correspond to the soil texture and organic matter. Broadleaf weeds should not exceed 5 inches in height and corn must be sprayed before it exceeds 11 inches in height. Accent herbicide may be added for postemergence grass control. Follow the label for Accent rates and maximum grass sizes.

Add 2.5% (v/v) spray grade UAN (28%N) or AMS (8.5 lbs/100 gallons spray solution) DO NOT use Methylated Soybean Oil (MSO). DO NOT make post applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

ACETOCHLOR 4.3 + ATZ 1.7 plus Hornet™ WDG

Only Apply This Tank Mixture To Field Corn.

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems  
Ground-Broadcast boom; banded

Approved Application Methods

Preplant Surface, Preplant Incorporated Applied

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe all directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

Preemergence Surface

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Adequate soil moisture is required for optimum herbicidal activity. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone.

NOTE: For all soil applications of this tank mixture, corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter™ (terbufos) or Thimet™ (phorate) insecticides are to be applied due to the risk of severe crop injury.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 11 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. Include a non-ionic surfactant at 0.25 percent v/v (1 qt/100 gal) or crop oil concentrate at 1 percent v/v for all postemergence applications. DO NOT make postemergence surface tank mixture applications using sprayable fluid fertilizer as the total carrier because severe crop injury may occur.

This tank mixture may be combined with Accent herbicide at 1/3 to 2/3 ounces per acre to increase control of emerged grasses. Follow all label restrictions and directions.

NOTE: Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

NOTE: OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE ACETOCHLOR 4.3 + ATZ 1.7 HERBICIDE AND HORNET WDG LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

## Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)	HORNET WDG ** (ounces)
Coarse	1.8	3.0
Medium	1.8 to 2.3	3.0 to 4.0
Fine	2.0 to 2.3	3.0 to 4.0

\* In areas of heavy weed infestation use up to 4.3 quarts per acre on medium- and fine-textured soils.

\*\* Hornet may be substituted for Hornet WDG at 80% of the rates above.

## ACETOCHLOR 4.3 + ATZ 1.7 plus Marksman

For use on level or flat-planted field corn on soils with more than 2 percent organic matter.

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems  
Ground-Broadcast boom; banded

## Approved Application Methods

### Preemergence Surface

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1-1/2 inches beneath the soil surface.

### Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 8 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

## Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)	MARKSMAN (pints)
Coarse**	1.8	3.5
Medium	1.8 to 2.3	3.5
Fine	2.0 to 2.3	3.5

- \* In areas of heavy weed infestation use up to 2.5 quarts per acre on medium and fine textured soils.
- \*\* On coarse-textured soils containing 2% or more organic matter, use ACETOCHLOR 4.3 + ATZ 1.7 plus Marksman only on sandy loam. Do not use on sand and loamy sand with less than 2% organic matter.

ACETOCHLOR 4.3 + ATZ 1.7 plus Permit®

Apply this tank mixture in water after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Permit herbicide label for specific weeds controlled postemergence.

Approved Application Systems  
Ground-Broadcast boom; banded

Approved Application Methods

Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and before grass weeds reach the 2-leaf stage. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)	PERMIT (ounces)
Coarse	1.8	2/3
Medium	1.8 to 2.3	2/3
Fine	2.8 to 2.3	2/3

- \* In areas of heavy weed infestation use up to 2.7 quarts per acre on medium- and fine-textured soils.

ACETOCHLOR 4.3 + ATZ 1.7 plus Pursuit®

Apply this tank mixture in water after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Pursuit herbicide label for specific weeds controlled postemergence.

Approved Application Systems  
Ground-Broadcast boom; banded

Approved Application Methods

Preplant Incorporated, Preemergence Surface

Postemergence Surface

Apply this tank mixture before weeds reach 3 inches in height and the corn is no more than 11 inches in height. Applications made after weeds are beyond 3 inches in height may not provide satisfactory control. Contour® or Resolve® herbicides may be substituted for Pursuit in this tank mixture. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop



injury may occur.

NOTE: THIS TANK MIXTURE IS FOR USE ONLY ON SELECTED FIELD CORN HYBRIDS (IMI-CORN) WARRANTED BY THE SEED COMPANY TO POSSESS RESISTANCE/TOLERANCE TO DIRECT APPLICATION OF PURSUIT (FOR EXAMPLE: PIONEER IR HYBRIDS). DO NOT APPLY PURSUIT TO CORN HYBRIDS WHICH LACK GENETIC RESISTANCE/TOLERANCE TO PURSUIT HERBICIDE. OBSERVE ALL PRECAUTIONS AND LIMITATIONS ON THE ACETOCHLOR 4.3 + ATZ 1.7® XTRA AND PURSUIT LABELS BEFORE USE OF THIS TANK MIXTURE INCLUDING PRECAUTIONS ON MINIMUM RECROPPING INTERVAL AND ROTATIONAL GUIDELINES.

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)	PURSUIT (ounces)
Coarse	1.8	4
Medium	1.8 to 2.3	4
Fine	2.0 to 2.3	4

\* In areas of heavy weed infestation use up to 2.7 quarts per acre on medium- and fine-textured soils.

#### ACETOCHLOR 4.3 + ATZ 1.7 plus Princep

Apply this tank mixture in water or sprayable fluid fertilizer solutions for control of yellow nutsedge and the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems  
Ground-Broadcast boom; banded

#### Approved Application Methods

Preplant Incorporated, Preemergence Surface

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP OTHER THAN CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)	PRINCEP 4L** (ounces)
Coarse	1.5to1.8	1.25 to 2.0
Medium	1.8 to 2.3	1.25 to 2.0
Fine	2.0 to 2.3	1.5 to 2.0

\* In areas of heavy weed infestation use up to 4.3 quarts per acre on medium- and fine-textured soils.

\*\* Use rates listed in this label when using Princep 4L. Use equivalent rates when using the Princep

Caliber 90 formulation. One quart of Princep 4L equals 1.1 pounds of Princep Caliber 90.

ACETOCHLOR 4.3 + ATZ 1.7 plus Python™ WDG

Only Apply This Tank Mixture To Field Corn.

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems  
Ground-Broadcast boom; banded

#### Approved Application Methods

##### Preplant Surface Applied

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

##### Preemergence Surface

NOTE: For all soil applications of this tank mixture, corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter (terbufos) or Thimet (phorate) insecticides are to be applied due to the risk of severe crop injury.

NOTE: Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

NOTE: OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE ACETOCHLOR 4.3 + ATZ 1.7 HERBICIDE AND PYTHON LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

#### Application Rates

SOIL TEXTURAL GROUP	BROADCAST RATER PER ACRE	
	ACETOCHLOR 4.3 + ATZ 1.7* (quarts)	PYTHON WDG** (ounces)
Coarse	1.8	0.8
Medium	1.8 to 2.3	0.8 to 1.0
Fine	2.0 to 2.3	0.8 to 1.0

\*In areas of heavy weed infestation use up to 4.3 quarts per acre on medium- and fine-textured soils.

\*\*Refer to the "USE RESTRICTIONS" and "GENERAL INFORMATION" sections of this label and PYTHON WDG for restrictions.

## LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

Harness, Roundup, Roundup Ready and Roundup WeatherMAX are trademarks of Monsanto Technology LLC.

Permit is a registered trademark of, and used under license from, Nissan Chemical Industries, Ltd. All other trademarks are the property of their respective owners.

Note For Records

Name of Product: Acetochlor 4,3 + ATZ 1,7

EPA Registration No./ File Symbol 42750-RNA(106)

Submission Date: 4/6/05

Received Date: 4/8/05

Date Worked: 12/8/05  
12/9/05 AWP Label Renew

Description of Action: New Product similar to 524-480 with Product Chem & Label Tox Data  
Route TRB  
Renew Label

Comments: TRB/TOX review received 5/5/05, acute tox studies acceptable. Product Category III for acute oral toxicity, primary eye and skin irritation, category II for acute dermal and acute inhalation toxicity, positive for dermal sensitization. PC review dated 12/8/05 - all requirements satisfied except for storage stability and corrosion characteristics.

Because CSF had to be revised to reflect registered (not cancelled) source of technical, need new formulators exemption statement. Called Company 12/8/05,

Label Renew - minor changes to PC, types, warranty

Register with comments once replacement formulators exemption received.

Signature and Date: Formulators exemption statement received 12/11/05 by email

Vickie K Walters 12/9/05





Morris Gaskins

12/13/2005 05:03 AM

To Vickie Walters/DC/USEPA/US@EPA

cc Morris Gaskins <MorrisG@albaughinc.com>

bcc

Subject Re: Acetochlor 4.3 + ATZ 1.7

Great! Sorry for late response but I had to send it from my home computer due to email weirdness at my work computer.

Call or email me at morrisg@albaughinc.com if you need anything else.

----- Original Message -----

From: <Walters.Vickie@epamail.epa.gov>  
To: "Morris Gaskins" [REDACTED]  
Sent: Monday, December 12, 2005 5:56 AM  
Subject: Re: Acetochlor 4.3 + ATZ 1.7

> Morris:

>

> I received your emails.

>

> Vickie

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Morris Gaskins

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12/11/2005 12:42  
AM

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Dear Mr Kitchens and Ms Walters,

This email is in response to both of your voice mails earlier in reference to Albaugh's application for Acetochlor 4.3 + ATZ 1.7 (EPA File Symbol 42750-RNA). I was traveling so my apologies for slow response.

Attached is the corrected CSF requested by Bruce. I had tried to email earlier last month but may not have gotten through. Also attached is the corrected Formulator's Exemption form requested by Vickie.

I will be back in office Monday so please call if you need anything else.

To  
Bruce Kitchens/DC/USEPA/US@EPA,  
Vickie Walters/DC/USEPA/US@EPA  
cc  
Subject  
Acetochlor 4.3 + ATZ 1.7



> Regards.

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> Morris Gaskins

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> Registrations Manager

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>

> Albaugh, Inc.

>

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> P.O. Box 2127

>

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> Valdosta, GA 31604-2127

>

>

> 1-229-244-3288

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> (See attached file: Acetochlor 4.3 + ATZ 1.7 forms.pdf)

>

>



**Morris Gaskins**

12/11/2005 12:42 AM

To Bruce Kitchens/DC/USEPA/US@EPA, Vickie  
Walters/DC/USEPA/US@EPA

cc

bcc

Subject Acetochlor 4.3 + ATZ 1.7

Dear Mr Kitchens and Ms Walters,

This email is in response to both of your voice mails earlier in reference to Albaugh's application for Acetochlor 4.3 + ATZ 1.7 (EPA File Symbol 42750-RNA). I was traveling so my apologies for slow response.

Attached is the corrected CSF requested by Bruce. I had tried to email earlier last month but may not have gotten through. Also attached is the corrected Formulator's Exemption form requested by Vickie.

I will be back in office Monday so please call if you need anything else.

Regards.

Morris Gaskins

Registrations Manager

Albaugh, Inc.

P.O. Box 2127

Valdosta, GA 31604-2127

1-229-244-3288



Acetochlor 4.3 + ATZ 1.7 forms.pdf





**Morris Gaskins**

12/10/2005 06:49 PM

To Bruce Kitchens/DC/USEPA/US@EPA, Vickie  
Walters/DC/USEPA/US@EPA

cc

bcc

Subject Acetochlor 4.3 + ATZ 1.6 (42750-RNA)

Guys, I was traveling but received your voice mails for updated forms for Albaugh's Acetochlor 4.3 + ATZ 1.7. For some reason I cannot send pdf attachments to EPA addresses from my email so will try to send from another computer by Monday morning. Will include the corrected CSF and Formulators

Sorry for delay.

Morris Gaskins  
Registrations Manager  
Albaugh, Inc.  
P.O. Box 2127  
Valdosta, GA 31604-2127  
1-229-244-3288



Morris Gaskins

12/10/2005 06:27 PM

To Bruce Kitchens/DC/USEPA/US@EPA, Vickie  
Walters/DC/USEPA/US@EPA

cc

bcc

Subject Acetochlor 4.3 + ATZ 1.7

Dear Mr Kitchens and Ms Walters,

This email is in response to both of your voice mails earlier in reference to Albaugh's application for Acetochlor 4.3 + ATZ 1.7 (EPA File Symbol 42750-RNA). I was traveling so my apologies for slow response.

Attached is the corrected CSF requested by Bruce. I had tried to email earlier last month but may not have gotten through. Also attached is the corrected Formulator's Exemption form requested by Vickie.

I will be back in office Monday so please call if you need anything else.

Regards.

Morris Gaskins  
Registrations Manager  
Albaugh, Inc.  
P.O. Box 2127  
Valdosta, GA 31604-2127  
1-229-244-3288



Acetochlor 4.3 + ATZ 1.7 forms.pdf



United States  
Environmental Protection Agency  
Washington, DC 20460  
**Formulator's Exemption Statement**  
(40 CFR 152.85)

**Applicant's Name and Address**

Albaugh Inc.  
121 NE 18th St.  
Ankney, IA 50021

**EPA File Symbol/Registration Number**

42750-RNA

**Product Name**

Acetochlor 4.3 + ATZ 1.7

**Date of Confidential Statement of Formula (EPA Form 8570-4)**

11/2/05

As an authorized representative of the applicant for registration of the product identified above, I certify that:

(1) This product contains the following active ingredient(s):

acetochlor

atrazine

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.

(3) Indicate by checking (A) or (B) below which paragraph applies:

☒ (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

**Source**

Active Ingredient	Product Name	Registration Number
acetochlor	[REDACTED]	[REDACTED]
atrazine	[REDACTED]	[REDACTED]
<p><i>*Product ingredient source information may be entitled to confidential treatment*</i></p>		
Signature	Name and Title Morris Gaskins Registrations Manager	Date 12/10/05

EPA Form 8570-27 (Rev. 8-95)

★ U.S. GPO: 1995-388-820/20413

White - EPA copy  
Yellow - Applicant copy



**FEE**

DATE OUT: 08 Dec 2005

SUBJECT: PRODUCT CHEMISTRY REVIEW MP [ ] EP [x]

DP BARCODE No.: D316235

Reg. File Symbol No.: 42750-RNA

PRODUCT NAME: Acetochlor 4.3 plus ATZ 1.7

COMPANY: Albaugh, Incorporated

Decision No. PC CODE: 121601, 080803

FOOD USE: [ ] Integrated Formulation [ ]

FROM: Bruce F. Kitchens, Chemist  
Technical Review Branch  
Registration Division (7505C)

*Bruce F. Kitchens*  
*8Bw* *12/8/05* *11/08/05*

TO: RM#25, Jim Tompkins/Vickie Walters  
Herbicide Branch (7505C)  
Registration Division (7505C)

**INTRODUCTION:**

The registrant, Albaugh, Incorporated, is submitting an application for the registration of the new end-use product, Acetochlor 4.3 + Atz 1.7. The active ingredients in this product are Acetochlor and Atrazine at label nominal concentrations of 46.3 and 18.3% a.i., respectively. This product is intended for use as a food use herbicide. In addition, the registrant states that this product is substantially similar to EPA Reg. No. 524-480 Harness Xtra. In support of this request, the registrant has submitted a basic Confidential Statement of Formula (CSF) dated 06 Apr 2005, a draft label, and product chemistry data contained in MRID#s 465200-01, 465200-02, and 465200-03. During the course of this review, the registrant submitted a revised basic CSF dated 02 Nov 2005 to correct an error. The Technical Review Branch (TRB) has been asked to review this submission.

**SUMMARY OF FINDINGS**

TRB has reviewed this submission and reports the following findings:

1. This product is produced from registered source of the active ingredients.
2. All inert ingredients are cleared for use in formulated pesticide products. In addition, all inert ingredients are exempt from the requirement of a food tolerance.
3. The nominal concentration of the active ingredient listed on the proposed CSF and the draft label are the same.
4. The draft label contains the appropriate storage and disposal statements.
5. The active ingredients' certified limits as proposed on the basic CSF are acceptable.
6. A comparison of the cited and proposed product reveals that both products have the same active ingredients, and one common ingredient.



## CONCLUSIONS:

TRB has reviewed this submission and concludes the following:

1. The basic formula CSF for the proposed end-use product, 02 Nov 2005 dated is acceptable.
2. This submission satisfies the data requirements as specified in 40 CFR 158.155, 158.160, 158.165, 158.167, 158.175, and 158.180 with respect to product identity and composition, description of materials used to produce the product, description of formulation process, discussion of formation of impurities, certified limits, and enforcement analytical method.
3. This submission satisfies the data requirements as specified in 40 CFR 158.190 with respect to physical and chemical properties. The data requirements for storage stability and corrosion characteristics are not satisfied. Inform the registrant that a one-year study is required to fulfill these data requirements. The corrosion characteristics study can be conducted concurrently with the storage stability study.
4. This product has been determined to be substantially similar to EPA Reg. No. 524-480 Harness Xtra from a product chemistry standpoint only.

## PRODUCT CHEMISTRY DATA (SERIES 830 Subgroup A)

Subgroup A – Product Identity and Composition	<u>Data Required Fulfilled</u>	<u>MRID No.</u>
830.1550. Chemical Identity	Y	465200-02
830.1600. Beginning Materials	Y	465200-02
830.1650. Formulation Process	Y	465200-02
830.1670. Discussion of Impurities	Y	465200-02
830.1700. Preliminary Analysis	NA	
830.1750. Certified Limits	Y	465200-02
830.1800. Enforcement Analytical Method	Y	465200-02

PRODUCT CHEMISTRY DATA (SERIES 830 Subgroup B)

Subgroup B – Physical and Chemical Properties	Data Required Fulfilled	Value or Qualitat. Descrip.	MRID No.
830.6302. Color	Y	White	465200-03
830.6303. Physical State	Y	Liquid	465200-03
830.6304. Odor	Y	Faint paint-like	465200-03
830.6314. Oxidation/Reduction Action	Y	Product did not react when mixed with kerosene, water, iron powder, monoammonium phosphate. Product not compatible with potassium	465200-03
830.6315. Flammability	Y	> 100°C	465200-03
830.6316. Explodability	NA	Product does not contain explosive components	
830.6317. Storage stability	N		
830.6319. Miscibility	NA	Product not mixed with petroleum solvents	
830.6320. Corrosion Characteristics	N		
830.6321. Dielectric Breakdown Voltage	NA	Product not used around electrical equipment	
830.7000. pH	Y	5.24	465200-03
830.7100. Viscosity	Y	608.373 centistokes @ 20°C 174.046 centistokes @ 40°C	465200-03



830.7000. Density/Bulk Density	Y	1.104 g/ml	465200-03
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Explanations: A = The Requirements Were Fulfilled; N = The Requirements Were Not Fulfilled; NA = Not Applicable; G = Data Gap; U = Requires Upgrading; I = Incomplete or In Progress; W = Waived.


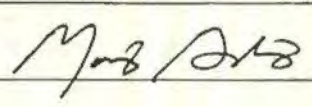
**Enforcement Analytical Method: (MRID No. 465200-02)**

The active ingredients, Acetochlor and Atrazine, were determined simultaneously by Gas Chromatography (GC) using Benzyl Benzoate as an internal standard under the following chromatographic conditions:

**Equipment and Parameters**

Instrument: Gas Chromatograph (GC)  
Detector: Flame Ionization Detector (FID)  
Column: HP-5 MS 30m x 0.25  $\mu$ m  
Inlet Temperature: 250°C  
Detector Temperature: 250°C  
Oven Temperature: 120°C to 250°C @ 10°C/min.  
Injection Volume: 1.0  $\mu$ l  
Flow Rate: N<sub>2</sub> - 1.0 ml/min  
Run Time: minutes  
Injection Mode: Split  
Split Ratio: 15:1  
Retention Time: Atrazine ca. 4.5 min  
Acetochlor ca. 10.8 min  
Benzyl Benzoate ca. 9.5 min



 United States <b>Environmental Protection Agency</b> Washington, DC 20460		<input checked="" type="checkbox"/> <b>Registration</b> <input type="checkbox"/> <b>Amendment</b> <input type="checkbox"/> <b>Other</b>	OPP Identifier Number
<b>Application for Pesticide - Section I</b>			
1. Company/Product Number 42750-RNA		2. EPA Product Manager J. Tompkins	
4. Company/Product (Name) Acetochlor 4.3 + Atrazine 1.7		3. Proposed Classification <input type="checkbox"/> None <input checked="" type="checkbox"/> Restricted	
5. Name and Address of Applicant (Include ZIP Code) Albaugh Inc. P.O. Box 2127 Valdosta, GA 31604-2127 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	
<b>Section - II</b>			
<input type="checkbox"/> Amendment - Explain below. <input checked="" type="checkbox"/> Resubmission in response to Agency letter dated <u>11/1/05</u> <input type="checkbox"/> Notification - Explain below.		<input type="checkbox"/> Final printed labels in response to Agency letter dated _____ <input type="checkbox"/> "Me Too" Application. <input checked="" type="checkbox"/> Other - Explain below.	
<b>Explanation:</b> Use additional page(s) if necessary. (For section I and Section II.) Submission of corrected basic CSF to update registration number of atrazine active source in response to TRB request.			
<b>Section - III</b>			
1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes" Unit Packaging wgt.      No. per container	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes" Package wgt      No. per container	2. Type of Container <input checked="" type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) <u>PVA</u>
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 2.5 gl, bulk	
5. Location of Label Directions <input checked="" type="checkbox"/> On label attached to container		6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other _____	
<b>Section - IV</b>			
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)			
Name Morris Gaskins		Title Registrations Manager	
		Telephone No. (Include Area Code) 229-244-3288	
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			5. Date Application Received <b>(Stamped)</b>
2. Signature 		3. Title Registrations Manager	
4. Typed Name Morris Gaskins		5. Date <u>11/2/05</u>	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

05/MAY/2005

MEMORANDUM

Subject: Name of Pesticide Product: Acetochlor 4.3 + ATZ 1.7  
EPA File Symbol: 42750-RNA  
DP Barcode: D316236  
Decision No.: 355951  
PC Code: 080803 Atrazine  
121601 Acetochlor

From: Rick J. Whiting, Biologist *RJW*  
Technical Review Branch *JRW*  
Registration Division (7505C)

To: Vickie Walters, RM Team  
Herbicide Branch  
Registration Division (7505C)

Applicant: Algaugh, Inc.  
121 NE 18<sup>th</sup> Street  
Ankeny, IA 50021

FORMULATION FROM LABEL:

<u>Active Ingredient(s):</u>		<u>% by wt.</u>
121601	Acetochlor (CAS No. 34256-82-1)	46.3%
080803	Atrazine (CAS No. 1912-24-9)	18.3%
<u>Inert Ingredient(s):</u>		35.4%
Total:		100.0%



**ACTION REQUESTED:** The Risk Manager requests:

"Please review the enclosed information to determine if registration of the proposed product is supported. Enclosed are company appl, letter, data matrix, proposed CSF and Label and MRIDs 46520004-09."

**BACKGROUND:** Algaugh, Inc. has submitted a six pack of acute toxicity studies in support of registration of Acetochlor 4.3 + ATZ 1.7, EPA File Symbol 42750-RNA. These studies were assigned MRID numbers 46520004, 46520005, 46520006, 46520007, 46520008 and 46520009.

**RECOMMENDATIONS:** The six studies have been reviewed and are classified as acceptable. The acute toxicity profile for Acetochlor 4.3 + ATZ 1.7, EPA File Symbol 42750-RNA, is as follows:

Acute oral toxicity	III	Acceptable	MRID 46520004
Acute dermal toxicity	IV	Acceptable	MRID 46520005
Acute inhalation toxicity	IV	Acceptable	MRID 46520006
Primary eye irritation	III	Acceptable	MRID 46520007
Primary skin irritation	III	Acceptable	MRID 46520008
Dermal sensitization	Positive	Acceptable	MRID 46520009

**LABELING:** Based on the toxicity profile above, the following are the precautionary and first aid statements for this product as obtained from the Label Review System:

**PRODUCT ID #:** 042750-00106

**PRODUCT NAME:** Acetochlor 4.3 + ATZ 1.7

**PRECAUTIONARY STATEMENTS**

**SIGNAL WORD:** CAUTION

**Hazards to Humans and Domestic Animals:**

Harmful if swallowed. Avoid contact with skin or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves (such as Natural Rubber, Selection Category A). Avoid contact with eyes or clothing. Wear protective eyewear.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**First Aid:**

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.



**Reviewer:** Rick J. Whiting  
**Risk Manager (EPA):** 25

**Date:** May 5, 2005

**STUDY TYPE:** Acute Oral Toxicity - Rat; OPPTS 870.1100; OECD 425

**TEST MATERIAL:** Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid)

**CITATION:** Merkel, D. (2005) Acute Oral Toxicity Up and Down Procedure in Rats: Acetochlor 4.3 + ATZ 1.7. Project Number: 16713, P320/UDP. Unpublished study prepared by Product Safety Laboratories. March 30, 2005. MRID No. 46520004.

**SPONSOR:** Algaugh, Inc., 121 NE 18<sup>th</sup> Street, Ankeny, IA 50021

**EXECUTIVE SUMMARY:** In an acute oral toxicity study (MRID 46520004), young adult female Sprague-Dawley rats (Age: 10-12 weeks; Weight: 190-240 g; Source: Ace Animals, Inc., Boyertown, PA) were given a single oral dose of Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid) using the Up and Down Procedure. “Based on estimate of the LD<sub>50</sub> supplied by the Sponsor (1,240 mg/kg), a Main Test was conducted using a default starting dose level of 390 mg/kg which was administered to one healthy female rat by oral gavage. Following the Up and Down procedure, six additional animals were dosed at levels of 1,240 or 5000 mg/kg. Females were selected for the test because they are frequently more sensitive to the toxicity of test compounds than males.” Body weights were obtained prior to dosing and on days 7 and 14 after dosing. Animals were observed for clinical signs of toxicity and mortality for several hours post-dosing and at least once daily thereafter for 14 days. A gross necropsy examination was performed on all animals at scheduled euthanasia.

Oral LD<sub>50</sub> Females = 2,599 mg/kg bw with an approximately 95% confidence interval of 5,000 mg/kg (upper) and 1,240 mg/kg lower.

Acetochlor 4.3 ATZ 1.7 is classified as Toxicity Category III based on the LD<sub>50</sub> value in female rats.

**390 mg/kg (1 animal):** This animal survived and gained body weight during the study. No clinical signs or gross abnormalities were noted.

**1240 mg/kg (3 animals):** All animals survived and gained body weight during the study. Two animals exhibited piloerection following dosing. No gross abnormalities were noted.

**5000 mg/kg (3 animals):** All animals died within one day of dosing. Observed clinical signs included hypoactivity and abnormal posture. Gross necropsy revealed discoloration of the intestines.

This acute oral study is classified as Acceptable. It does satisfy the guideline requirement for an acute oral study (OPPTS 870.1100; OECD 425) in the rat.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.



## RESULTS and DISCUSSION:

"Individual animals were dosed as follows:

**Main Test**

Dosing Sequence	Animal No.	Dose level (mg/kg)	24 hour Outcome	14 Day Outcome
1	9932	390	S	S
2	093	1240	S	S
3	129	5000	D	D
4	148	1240	S	S
6	271	5000	D	D
7	295	1240	S	S
8	322	5000	D	D

S = survival    D = death

"Based on estimate of the LD<sub>50</sub> supplied by the Sponsor (1,240 mg/kg), a Main Test was conducted using a default starting dose level of 390 mg/kg which was administered to one healthy female rat by oral gavage. Following the Up and Down procedure, six additional animals were dosed at levels of 1,240 or 5000 mg/kg. Females were selected for the test because they are frequently more sensitive to the toxicity of test compounds than males."

OT425statpgm (Version: 1.0) Test Results and Recommendations  
Acute Oral Toxicity (OECD Test Guideline 425) Statistical Program

Date/Time: Thursday, April 28, 2005, 1:52:02 PM

Data file name: work.dat

Last modified: 4/28/2005 1:52:00 PM

Test/Substance: Acetochlor 4.3 + ATZ 1.7

Test type: Main Test

Limit dose (mg/kg): 5000

Assumed LD50 (mg/kg): Default

Assumed sigma (mg/kg): 0.5

Recommended dose progression: 5000, 1750, 550, 175, 55, 17.5, 5.5, 1.75



DATA:

Test Animal Dose Short-term Long-term  
Seq. ID (mg/kg) Result Result

1	9932	390	O	O
2	093	1240	O	O
3	129	5000	X	X
4	148	1240	O	O
5	271	5000	X	X
6	295	1240	O	O
7	322	5000	X	X

(X = Died, O = Survived)

Dose Recommendation: The main test is complete.

Stopping criteria met: 5 reversals in 6 tests.

SUMMARY OF LONG-TERM RESULTS:

Dose	O	X	Total
390	1	0	1
1240	3	0	3
5000	0	3	3
All Doses	4	3	7

Statistical Estimate based on long term outcomes:

Estimated LD50 = 2599 (Based on an assumed sigma of 0.5).  
Approximate 95% confidence interval is 1240 to 5000.

**Statistics:** Acute Oral Toxicity (Guideline 425) Statistical Program (Westat, version 1.0, May 2001) was used for all data analyses including: dose progression selections, stopping criteria determinations and/or LD<sub>50</sub> and confidence limit calculations.

**A. Mortality:** as noted in table.

**B. Clinical observations: 390 mg/kg (1 animal):** This animal survived and gained body weight during the study. No clinical signs were noted.

**1240 mg/kg (3 animals):** All animals survived and gained body weight during the study. Two animals exhibited piloerection following dosing.

**5000 mg/kg (3 animals):** All animals died within one day of dosing. Observed clinical signs included hypoactivity and abnormal posture.

**C. Gross Necropsy:** 390 mg/kg (1 animal): No gross abnormalities were noted.

1240 mg/kg (3 animals): No gross abnormalities were noted.

5000 mg/kg (3 animals): Gross necropsy revealed discoloration of the intestines.

**D. Reviewer's Conclusions:** From page 11 of study: "Under the conditions of this study, the acute LD<sub>50</sub> of Acetochlor 4.3 + ATZ 1.7 is estimated to be 2,599 mg/kg of body weight in female rats with an approximate 95% confidence interval of 5,000 mg/kg (upper) and 1,240 mg/kg (lower).

**E. Deficiencies:** None.



**Reviewer:** Rick J. Whiting  
**Risk Manager (EPA):** 25

**Date:** May 5, 2005

**STUDY TYPE:** Acute Dermal Toxicity - Rat; OPPTS 870.1200; OECD 402

**TEST MATERIAL:** Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid)

**CITATION:** Merkel, D. (2005) Acute Dermal Toxicity Study in Rats - Limit Test: Acetochlor 4.3 + ATZ 1.7. Project Number: 16714, P322. Unpublished study prepared by Product Safety Laboratories. March 30, 2005. MRID No. 46520005.

**SPONSOR:** Algaugh, Inc., 121 NE 18<sup>th</sup> Street, Ankeny, IA 50021

**EXECUTIVE SUMMARY:** In an acute dermal toxicity study (MRID 46520005), five young adult Sprague-Dawley rats/sex (Age: 9-10 weeks; Weight: 287-304 g males; 195-216 g females; Source: Ace Animals, Inc., Boyertown, PA), were dermally exposed to a single application of Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid) at 5000 mg/kg for 24 hours. Body weights were recorded prior to application and again on days 7 and 14. The test material was applied over a dose area of approximately 2 inches x 3 inches (approximately 10% of the body surface) and covered with a gauze pad. After 24 hours of exposure, the pad were removed and the test sites were cleansed of any residual test material.

Dermal LD<sub>50</sub> Males => 5000 mg/kg bw

Dermal LD<sub>50</sub> Females => 5000 mg/kg bw

Dermal LD<sub>50</sub> Combined => 5000 mg/kg bw

Acetochlor 4.3 ATZ 1.7 is classified as Toxicity Category IV based on the observed LD<sub>50</sub> value in both sexes.

All animals survived and gained weight during the study. There was no evidence of clinical toxicity, dermal irritation or behavioral changes. No gross abnormalities were noted a necropsy.

This acute dermal study is classified Acceptable. It does satisfy the guideline requirement for an acute dermal study (OPPTS 870.1200; OECD 402) in the rat.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.



## RESULTS and DISCUSSION:

Dose (mg/kg bw)	Mortality/Number Tested		
	Males	Females	Combined
5000	0/5	0/5	0/10

**Statistics:** The dermal LD<sub>50</sub> was calculated using the limit dose.

**A. Mortality:** as noted in table.

**B. Clinical observations:** All animals survived and gained weight during the study. There was no evidence of clinical toxicity, dermal irritation or behavioral changes.

**C. Gross Necropsy:** No gross abnormalities were noted a necropsy.

**D. Reviewer's Conclusions:** From page 10 of the study: "Under the conditions of this study, the single dose acute dermal

**E. Deficiencies:** None.



**Reviewer:** Rick J. Whiting  
**Risk Manager (EPA):** 25

**Date:** May 5, 2005

**STUDY TYPE:** Acute Inhalation Toxicity - Rat; OPPTS 870.1300; OECD 403

**TEST MATERIAL:** Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid)

**CITATION:** Merkel, D. (2005) Acute Inhalation Toxicity Study in Rats - Limit Test: Acetochlor 4.3 + ATZ 1.7. Project Number: 16715, P330. March 30, 2005. MRID No. 46520006.

**SPONSOR:** Algaugh, Inc., 121 NE 18<sup>th</sup> Street, Ankeny, IA 50021

**EXECUTIVE SUMMARY:** In an acute inhalation toxicity study (MRID 46520006), five young adult Sprague-Dawley rats/sex (Age: 9-10 weeks; Weight: 284-298 g males; 205-212 g females; Source: Ace Animals, Inc., Boyertown, PA) were exposed by inhalation (nose-only exposure) to Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid) at 2.01 mg/L for four hours and one minute. "The exposure was extended beyond 4 hours to allow the chamber to reach equilibrium ( $T_{99}$ ). The times for 90 and 99% equilibration of the chamber atmosphere were 0.6 and 1.2 minutes, respectively." Body weights were recorded prior to exposure and on days 7 and 14. All animals were observed for clinical signs of toxicity and mortality during the exposure period. After removal from exposure tube, the animals were examined at least once daily for up to 14 days. A gross necropsy examination was performed on all animals at the scheduled euthanasia.

LC<sub>50</sub> Males => 2.01 mg/L

LC<sub>50</sub> Females => 2.01 mg/L

LC<sub>50</sub> Combined => 2.01 mg/L

Acetochlor 4.3 ATZ 1.7 is classified as Toxicity Category IV based on the observed LC<sub>50</sub> values in both sexes.

All animals survived exposure to the test material. One male animal lost weight through Day 7 but all animals gained body weight by the end of the study. Following the exposure, all male rats were hypoactive and one male also had reduced fecal volume. All affected animals recovered by Day 9.

No gross abnormalities were noted for any of the animals.

The gravimetric and nominal chamber concentrations were 2.08 and 17.55 mg/L, respectively. The mass median aerodynamic diameter was estimated to be 3.4  $\mu$ m with a geometric standard deviation of 2.00.

This acute inhalation study is classified as Acceptable. It does satisfy the guideline requirement for an acute inhalation study (OPPTS 870.1300; OECD 403) in the rat.



**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

**RESULTS and DISCUSSION:**

Nominal Conc. (mg/L)	Actual Conc. (Gravimetric/ Analytical) (mg/L)	MMAD $\mu\text{m}$	GSD $\mu\text{m}$	Mortality/Number Tested		
				Males	Females	Combined
2.01	428.73	2.8	1.90	0/5	0/5	0/10

**Test Atmosphere / Chamber Description:**

Chamber Volume:	6.97 L
Airflow:	25.7 LPM
Temperature:	19-21°C
Relative Humidity:	40-45%
Time to Equilibrium:	0.6 min. for 90% 1.2 min. for 99%

**Test atmosphere concentration:** From Page 10 of study: "Chamber Concentration Measurements: Gravimetric samples were withdrawn at 6 intervals from the breathing zone of the animals. Samples were collected using 25 mm glass fiber filters (GF/B Whatman) in a filter holder attached by ¼ inch tygon tubing to a vacuum pump (Reliance Electric, Model #G557X). Filter papers were weighed before and after collection to determine the mass collected. This value was divided by the total volume of air sampled to determine the chamber concentration. The collections were carried out for 3 minutes at airflows of 4 Lpm. Sample airflows were measured using a Mass Flowmeter (Omega, Model #FMA 5610)."

**Particle size determination:** From Page 10 of study: "Particle Size Distribution. An eight-stage Andersen cascade impactor was used to assess the particle size distribution of the test atmosphere. Samples were withdrawn from the breathing zone of the animals at two intervals. The filter paper collection stages were weighed before and after sampling to determine the mass collected upon each stage. The aerodynamic mass median diameter and geometric standard deviation were determined graphically using two-cycle logarithmic probit axes.

**Statistics:** The  $LC_{50}$  was calculated using the .

**A. Mortality:** as noted in table.

**B. Clinical observations:** One male animal lost weight through Day 7 but all animals gained body weight by the end of the study. Following the exposure, all male rats were hypoactive and one male also had reduced fecal volume. All affected animals recovered by Day 9.

**C. Gross Necropsy:** No gross abnormalities were noted for any of the animals.

**D. Reviewer's Conclusions:** From Page 12 of study: "Under the conditions of this study, the single exposure acute inhalation LC<sub>50</sub> of Acetochlor 4.3 + ATZ 1.7 is greater than 2.01 mg/L in male and female rats."

**E. Deficiencies:** None.



**Reviewer:** Rick J. Whiting  
**Risk Manager (EPA):** 25

**Date:** May 5, 2005

**STUDY TYPE:** Primary Eye Irritation - Rabbit; OPPTS 870.2400; OECD 405

**TEST MATERIAL:** Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid)

**CITATION:** Merkel, D. (2005) Primary Eye Irritation Study in Rabbits: Acetochlor 4.3 + ATZ 1.7. Project Number: 16726, P324. Unpublished study prepared by Product Safety Laboratories. March 30, 2005. MRID No. 46520007.

**SPONSOR:** Algaugh, Inc., 121 NE 18<sup>th</sup> Street, Ankeny, IA 50021

**EXECUTIVE SUMMARY:** In a primary eye irritation study (MRID 46520007), 0.1 ml of Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid) was placed into the right eye of three adult New Zealand White rabbits (2 M & 1 F; Source: Robinson Services, Inc., Clemmons, NC). The left eye remained untreated and served as a control. All animals were observed for ocular irritation and lesions at 1, 24, 48 and 72 hours after instillation. Ocular irritation was evaluated by the method of Draize et al. (1944).

Acetochlor 4.3 ATZ 1.7 is classified as Toxicity Category III based on the corneal opacity observed at 48 hours.

No iritis was observed in any treated eye during the study. Within 24 hours of the test material instillation, one male rabbit developed corneal opacity (score of "1") but was resolved by 72 hours. Conjunctival redness was observed at 1 hour (3/3, score of "1") and 24 hours (1/3, score of "2") and was completely resolved by 72 hours. Conjunctival discharge was observed at 1 hour (3/3, score of "3") and 24 hours (3/3, score of "2") and was completely resolved by 72 hours.

This study is classified as Acceptable. It does satisfy the guideline requirement for a primary eye irritation study (OPPTS 870.2400; OECD 405) in the rabbit.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.



## RESULTS AND DISCUSSION:

	Hours			
	1	24	48	72
Corneal Opacity	0/3	1/3	1/3	0/3
Iritis	0/3	0/3	0/3	0/3
Conjunctivae:				
Redness*	3/3	1/3	0/3	0/3
Chemosis*	0/3	0/3	0/3	0/3
Discharge*	3/3	3/3	0/3	0/3
Severity of Irritation – Mean Score	12.0	10.3	5.0	0

\*Score of 2 or more required to be considered "positive."

**A. Observations:** No iritis was observed in any treated eye during the study. Within 24 hours of the test material instillation, one male rabbit developed corneal opacity (score of "1") but was resolved by 72 hours. Conjunctival redness was observed at 1 hour (3/3, score of "1") and 24 hours (1/3, score of "2") and was completely resolved by 72 hours. Conjunctival discharge was observed at 1 hour (3/3, score of "3") and 24 hours (3/3, score of "2") and was completely resolved by 72 hours.

**B. Reviewer's Conclusions:** From Page 11 of the study: "Under the conditions of the study, Acetochlor 4.3 + ATZ 1.7 is classified as mildly irritating to the eye."

**C. Deficiencies:** None.



**Reviewer:** Rick J. Whiting  
**Risk Manager (EPA):** 25

**Date:** May 5, 2005

**STUDY TYPE:** Primary Dermal Irritation - Rabbit; OPPTS 870.2500; OECD 404

**TEST MATERIAL:** Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid)

**CITATION:** Merkel, D. (2005) Primary Skin Irritation in Rabbits: Acetochlor 4.3 + ATZ 1.7. Project Number: 16717, P326. Unpublished study prepared by Product Safety Laboratories. March 30, 2005. MRID No. 46520008.

**SPONSOR:** Algaugh, Inc., 121 NE 18<sup>th</sup> Street, Ankeny, IA 50021

**EXECUTIVE SUMMARY:** In a primary dermal irritation study (MRID 46520008), 0.5 ml of Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid) was applied to the skin of three young adult male New Zealand White rabbits (Age: not reported; Source: Robinson Services, Inc., Clemmons, NC). The test material was applied to one 6-cm<sup>2</sup> intact dose site on each test animal and covered with a 1-inch x 1-inch gauze pad. The pad and entire trunk of each test animal were wrapped with semi-occlusive tape to avoid dislocation of the pad. After 4 hours of exposure, the pads were removed and the test sites were cleansed of any residual test material. Animals were examined for signs of erythema and edema and the

Based on the moderate irritation observed at 72 hours, Acetochlor 4.3 ATZ 1.7 is classified at Toxicity Category III.

Primary Dermal Irritation Index (PDII) = 2.67 For the first 48 hours after patch removal, all three treated sites exhibited well-defined erythema (score of "2") and very slight edema (score of "1"). At 72 hours very slight erythema (score of "1") and very slight edema (score of "1") was observed. Although desquamation was noted at on dose site, all animals were free of erythema and edema on Day 7.

This study is classified as Acceptable. It does satisfy the guideline requirement for a primary dermal irritation study (OPPTS 870.2500; OECD 404) in the rabbit.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.



## RESULTS and DISCUSSION:

### INDIVIDUAL SKIN IRRITATION SCORES

#### ERYTHEMA/EDEMA

Animal No.	Sex	Hours After Patch Removal				Days
		1	24	48	72	7
13551	M	2/1	2/1	2/1	1/0	0/0
13552	M	2/1	2/1	2/1	1/1	0/0
13553	M	2/1	2/1	2/1	1/1	0/0
Severity of Irritation - Mean Score		3.0	3.0	3.0	1.7	0.0

**A. Observations:** ma (score of "2") and very slight edema (score of "1". At 72 hours very slight erythema (score of "1") and very slight edema (score of "1") was observed. Although desquamation was noted at on dose site, all animals were free of erythema and edema on Day 7.

**B. Results:** Primary Dermal Irritation Index (PDII) = 2.67

**C. Reviewer's Conclusions:** From Page 11 of study: "Under the conditions of this study, Acetochlor 4.3 + ATZ 1.7 is classified as moderately irritating to the skin."

**D. Deficiencies:** None.



**Reviewer: Rick J. Whiting**  
**Risk Manager (EPA): 25**

**Date: May 5, 2005**

**STUDY TYPE:** Dermal Sensitization - Guinea Pig; OPPTS 870.2600; OECD 406, 429

**TEST MATERIAL:** Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid)

**CITATION:** Merkel, D. (2005) Dermal Sensitization Study in Guinea Pigs (Buehler Method): Acetochlor 4.3 + ATZ 1.7. Project Number: 16718, P328. Unpublished study prepared by Product Safety Laboratories. March 30, 2005. MRID No. 46520009.

**SPONSOR:** Algaugh, Inc., 121 NE 18<sup>th</sup> Street, Ankeny, IA 50021

**EXECUTIVE SUMMARY:** In a dermal sensitization study (MRID 46520009) conducted with Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid), 30 young adult male Hartley albino guinea pigs (Weight: 329-399 g; Source: Elm Hill Breeding Labs, Chelmsford, MA) were tested using the Buehler Method (1980).

“The undiluted test substance was topically applied to twenty healthy test guinea pigs, once each week for a three-week induction period. Twenty-seven days after the first induction dose, a challenge dose of the test substance at its highest non-irritating concentration (HNIC, determined in the preliminary irritation screen to be a 75% w/w mixture in distilled water) was applied to a naive site on each pig. A naive control group (ten animals) was maintained under the same environmental conditions and treated with the test substance at challenge only. Approximately 24 and 48 hours after each induction and challenge dose, the animals were scored for erythema.”

In this study, Acetochlor 4.3 ATZ 1.7 is considered to be a contact sensitizer.

Results from Page 12 of Study:

#### **Induction Phase:**

Test Animals (100% test substance): Very faint to moderate erythema (0.5-2) was noted for all test sites during the induction phase.

Historical Positive Control Animals (HCA applied undiluted): Very faint to faint erythema (0.5-1) was noted for all positive control test sites during the induction phase.

#### **Challenge Phase:**

Test Animals (75% w/w mixture of the test substance in distilled water): Thirteen of twenty test animals exhibited signs of a sensitization response (faint erythema [1]) 24 and/or 48 hours after challenge. Very faint erythema (0.5) was noted at most other sites.

Naive Control Animals (75% w/w mixture of the test substance in distilled water): Very faint erythema (0.5) was noted at four of ten naive control sites 24 hours following the challenge application. Similar irritation persisted at one site through 48 hours.



Historical Positive Control Animals (75% w/w mixture of HCA in mineral oil): Six of ten positive control animals exhibited signs of a sensitization response (faint erythema [1]) 24 and 48 hours after challenge.

Historical Naive Control Animals (75% w/w mixture of HCA in mineral oil): Very faint erythema (0.5) was noted for four of five positive control naive test sites 24 hours after challenge. Irritation persisted at two of these sites through 48 hours.

This study is classified as Acceptable. It does satisfy the guideline requirement for a dermal sensitization study (OPPTS 870.2600; OECD 406, 429) in the Guinea pig.

**COMPLIANCE:** Signed and dated GLP, Quality Assurance, and Data Confidentiality statements were provided.

## **I. PROCEDURE**

**A. Induction:** "Once each week for three weeks, four-tenths of a milliliter of the undiluted test substance was applied to the left side of each test animal using an occlusive 25 mm Hill Top Chamber. The chambers were secured in place and wrapped with non-allergenic Durapore adhesive tape to avoid dislocation of the chambers and to minimize loss of the test substance. After the 6-hour exposure period, the chambers were removed and the test sites were gently cleansed of any residual test substance. Approximately 24 and 48 hours after each induction application, readings were made of local reactions (erythema) according to the scoring system."

**B. Challenge:** "Twenty-seven days after the first induction dose, four-tenths of a milliliter of a 75% w/w mixture of the test substance in distilled water (HNIC) was applied to a naive site on the right side of each animal as a challenge dose, using the procedures described above. These sites were evaluated for a sensitization response (erythema) approximately 24 and 48 hours after the challenge application according to the system."

**C. Naive Controls:** "In addition to the test animals, 10 guinea pigs from the same shipment were maintained under identical environmental conditions and were treated with the HNIC of the test substance at challenge only. These animals constituted the "naive control" group."

## **II. RESULTS and DISCUSSION:**

### **A. Reactions and duration:**

#### **Induction Phase:**

Test Animals (100% test substance): Very faint to moderate erythema (0.5-2) was noted for all test sites during the induction phase.



**Challenge Phase:**

Test Animals (75% w/w mixture of the test substance in distilled water): Thirteen of twenty test animals exhibited signs of a sensitization response (faint erythema [1]) 24 and/or 48 hours after challenge. Very faint erythema (0.5) was noted at most other sites.

**B. Positive control:**

**Induction Phase:**

Historical Positive Control Animals (HCA applied undiluted): Very faint to faint erythema (0.5-1) was noted for all positive control test sites during the induction phase.

**Challenge Phase:**

Naive Control Animals (75% w/w mixture of the test substance in distilled water): Very faint erythema (0.5) was noted at four of ten naive control sites 24 hours following the challenge application. Similar irritation persisted at one site through 48 hours.

Historical Positive Control Animals (75% w/w mixture of HCA in mineral oil): Six of ten positive control animals exhibited signs of a sensitization response (faint erythema [1]) 24 and 48 hours after challenge.

Historical Naive Control Animals (75% w/w mixture of HCA in mineral oil): Very faint erythema (0.5) was noted for four of five positive control naive test sites 24 hours after challenge. Irritation persisted at two of these sites through 48 hours.

**C. Reviewer's Conclusions:** From Page 12 of study: "Based on these findings and on the evaluation system used, Acetochlor 4.3 + A TZ 1.7 is considered to be a contact sensitizer.

The positive response observed in the historical positive control validation study with alpha-Hexylcinnamaldehyde Technical (HCA) validates the test system used in this study (see Section 7)."

**D. Deficiencies:** None



## ACUTE TOX ONE-LINERS

1. **DP BARCODE:** D316236
2. **PC CODE:** 121601 (Acetochlor) & 080803 (Atrazine)
3. **CURRENT DATE:** 05/05/2005
4. **TEST MATERIAL:** Acetochlor 4.3 ATZ 1.7 (Acetochlor – 46.4%, Atrazine – 18.79%; Lot No. 209-117; white liquid)

Study/Species/Lab Study # /Date	MRID	Results	Tox. Cat.	Core Grade
Acute oral toxicity / rat Product Safety Laboratories 16713, P320/UDP / 03-30-05	46520004	LD <sub>50</sub> = 2,599 mg/kg (females)	III	A
Acute dermal toxicity / rat Product Safety Laboratories 16714, P322/ 03-30-05	46520005	LD <sub>50</sub> => 5000 mg/kg (males and females)	IV	A
Acute inhalation toxicity / rat Product Safety Laboratories 16715, P330 / 03-30-05	46520006	LC <sub>50</sub> => 2.01 mg/L (males and females)	IV	A
Primary eye irritation / rabbit Product Safety Laboratories 16726, P324 / 03-30-05	46520007	Corneal opacity at 24 & 48 hrs; resolved by 72 hrs.	III	A
Primary dermal irritation / rabbit Product Safety Laboratories 16717, P326 / 03-30-05	46520008	Moderately irritating at 72 hours.	III	A
Dermal sensitization / guinea pig Product Safety Laboratories 16718, P328 / 03-30-05	46520009	Contact sensitizer	---	A

**Core Grade Key:** A = Acceptable, S = Supplementary, U = Unacceptable

**CORPORATE OFFICE**  
121 NE 18th Street  
Ankeny, IA 50021  
515.964.9444 (Phone)  
800.247.8013 (Toll Free)  
515.964.7813 (Fax)

# ALBAUGH, INC.

**MEMPHIS OFFICE**  
1910 Exeter Road, Ste. 1  
Memphis, TN 38138-2971  
901.309.8122 (Phone)  
901.309.8532 (Fax)

FEDERAL EXPRESS

465200-00

April 6, 2005

*file copy*

Document Processing Desk (REGFEE)  
Mr. Jim Tompkins (PM 25)  
Registration Division  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
Crystal Mall 2, Room 266A  
1801 S. Bell Street  
Arlington, VA 22202

RE: Acetochlor 4.3 + ATZ 1.7  
Initial application

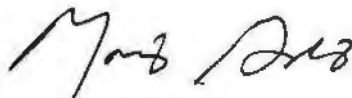
Dear Mr. Tompkins,

The enclosed submission is Albaugh's initial application to register the above referenced product. Documents enclosed to support this application are detailed on the enclosed transmittal page.

This application is being submitted as a "me too" of Monsanto's Harness Xtra (EPA Reg. No. 524-480) as stamped approved by the Agency on November 3, 2004. Albaugh believes this application should be classified as a R31 - New product, non-fast track with a \$4,000 fee and 10 month response time.

Please call if you have any questions.

Regards,



Morris Gaskins  
Registrations Manager  
Albaugh, Inc.  
229-244-3288

**Agri Star**™  
By Albaugh, Inc.

PREMIER SUPPLIER OF OFF-PATENT CROP PROTECTION PRODUCTS  
[www.albaughinc.com](http://www.albaughinc.com)



## TRANSMITTAL DOCUMENT

**Name and address of submitter:**

Albaugh, Inc.  
P.O. Box 2127  
Valdosta, GA 31604-2127

**Company Official:** Morris Gaskins

**Telephone:** (229) 244-3288

**Regulatory action for which this package is submitted:**

Initial application to register ACETOCHLOR 4.3 + ATZ 1.7

**Transmittal Date:** April 6, 2005

**List of items submitted:**

- Transmittal page
- Cover letter
- 8570-1 application form
- 8570-34 Certification With Respect to Citation of Data form
- 8570-35 Data Matrix (internal use copy)
- 8570-35 Data Matrix (public file copy)
- 8570-27 Formulators Exemption
- Draft label (5 copies)
- Basic CSF (2 copies)

46520001

- Summary of OPPTS 830.1000 Series Product Properties Test Guidelines (3 copies)

46520002

- Guidelines 830.1550, 830.1600, 830.1650, 830.1670, 830.1750, 830.1800. Product Identity and Composition, Description of Materials Used to Produce the Product, Description of Formulation Process, Discussion of Formation of Impurities and Certified Limits (3 copies)

46520003

- Guidelines 830.6302, 830.6303, 830.6304, 830.6314, 830.6315, 830.7000, 830.7100, 830.7300. Physical and Chemical Characteristics (3 copies)

46520004

- Guideline 870.1100 Acute Oral Toxicity (3 copies)

46520005

- Guideline 870.1200 Acute Dermal Toxicity (3 copies)

46520006

- Guideline 870.1300 Acute Inhalation Toxicity (3 copies)

46520007

- Guideline 870.2400 Primary Eye Irritation (3 copies)

46520008

- Guideline 870.2500 Primary Skin Irritation (3 copies)

46520009

- Guideline 870.2600 Dermal Sensitization (3 copies)





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

April 12, 2005

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

ALBAUGH INC  
PO Box 2127  
VALDOSTA, GA 31604-2127

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 08-APR-05. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

April 12, 2005

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

PLEASE RETURN A COPY OF THIS LETTER WITH PAYMENT

OPP Decision Number: D-355951  
EPA File Symbol or Registration Number: 42750-RNA  
Product Name: ACETOCHLOR 4.3 + ATZ 1.7  
EPA Receipt Date: 08-Apr-2005  
EPA Company Number: 42750  
Company Name: ALBAUGH INC

MORRIS GASKINS  
ALBAUGH, INC  
ALBAUGH INC  
PO Box 2127  
VALDOSTA, GA 31604-2127

SUBJECT: Receipt of Registration Application Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application for registration. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R31

NEW PRODUCT;NON-FAST TRACK (INCLUDES REVIEWS OF PRODUCT  
CHEMISTRY;ACUTE TOXICITY;PUBLIC HEALTH PEST EFFICACY);

Please remit payment in the amount of: \$ 4,000 to:

By USPS:  
USEPA Washington Finance Center  
Pesticide Registration Service Fee  
PO Box 360277  
Pittsburgh, PA 15251



By Courier:  
U.S. EPA Washington Finance Center  
Pesticide Registration Service Fee  
C/O Mellon Client Service Center  
500 Ross Street, Room 670  
Box 360277  
Pittsburgh, PA 15251-6277  
Attn: EPA Module Supervisor  
Telephone: (412) 236-2294

All payments must be in United States currency by check, bank draft, or money order drawn to the order of the Environmental Protection Agency. To ensure proper credit, please write the OPP DECISION NUMBER on your check, and enclose a copy of this letter with your payment.

You may be eligible for a full or partial waiver of the registration service fee if, for example, you qualify as a small business or are applying for a minor use, or if your application is solely associated with an IR-4 tolerance petition. Please be advised that if you intend to request a waiver, you must do so in writing within 15 days of receipt of this invoice instead of remitting the amount indicated above. OPP will not consider waiver requests after the registration service fee has been paid. Information regarding eligibility and how to request and document a fee waiver is available on the OPP Fee for Service web site at [www.epa.gov/pesticides/fees](http://www.epa.gov/pesticides/fees).

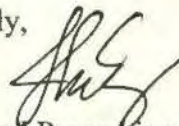
Please send Registration Service Fee Waiver requests to:

By USPS:  
Document Processing Desk (WAIVER)  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave NW  
Washington, DC 20460

By Courier:  
Document Processing Desk (WAIVER)  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
Room 266A, Crystal Mall #2  
1801 S. Bell St.  
Arlington, VA 22202

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 305-6249.

Sincerely,



Front End Processing Staff  
Information Resources and Services Division



# Fee for Service

This package includes the following

☒ New Registration

☐ Amendment

☐ Waiver Request and type

☐ 100% ☐ 50% ☐ IR-4 ☐ Minor ☐ Fed/state

for Division

☒ RD

☐ AD

☐ BPPD

Risk Mgr.

25

Receipt Nos. S-

777280

EPA File Symbol/Reg. No.

42750-RNA

Pin-Punch Date:

4/8/05

☐ This item is NOT subject to FFS action.

## Action Code:

Requested:

R-31

Granted:

R-31

Amount due: \$ 4,000<sup>00</sup>

## Parent/Child Decisions:

☐ Voluntary Payment Request

% Reduction \_\_\_\_\_

Reviewer: J. Miller

Date: 4/12/05

Remarks: (use back if needed)

Me Too Application

(21)  
- 04/12/05

**CORPORATE OFFICE**  
121 NE 18th Street  
Ankeny, IA 50021  
515.964.9444 (Phone)  
800.247.8013 (Toll Free)  
515.964.7813 (Fax)

# ALBAUGH, INC.

**MEMPHIS OFFICE**  
1910 Exeter Road, Ste. 1  
Memphis, TN 38138-2971  
901.309.8122 (Phone)  
901.309.8532 (Fax)

FEDERAL EXPRESS

April 6, 2005

Document Processing Desk (REGFEE)  
Mr. Jim Tompkins (PM 25)  
Registration Division  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
Crystal Mall 2, Room 266A  
1801 S. Bell Street  
Arlington, VA 22202

RE: Acetochlor 4.3 + ATZ 1.7  
Initial application

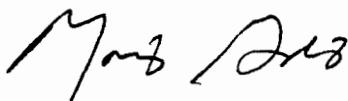
Dear Mr. Tompkins,

The enclosed submission is Albaugh's initial application to register the above referenced product. Documents enclosed to support this application are detailed on the enclosed transmittal page.

This application is being submitted as a "me too" of Monsanto's Harness Xtra (EPA Reg. No. 524-480) as stamped approved by the Agency on November 3, 2004. Albaugh believes this application should be classified as a R31 - New product, non-fast track with a \$4,000 fee and 10 month response time.

Please call if you have any questions.

Regards,



Morris Gaskins  
Registrations Manager  
Albaugh, Inc.  
229-244-3288

**Agri Star**™  
By Albaugh, Inc.

PREMIER SUPPLIER OF OFF-PATENT CROP PROTECTION PRODUCTS  
www.albaughinc.com



## TRANSMITTAL DOCUMENT

**Name and address of submitter:**

Albaugh, Inc.  
P.O. Box 2127  
Valdosta, GA 31604-2127

**Company Official:** Morris Gaskins

**Telephone:** (229) 244-3288

**Regulatory action for which this package is submitted:**

Initial application to register ACETOCHLOR 4.3 + ATZ 1.7

**Transmittal Date:** April 6, 2005

**List of items submitted:**

- Transmittal page
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- 8570-1 application form
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- Guideline 870.2400 Primary Eye Irritation (3 copies)
- Guideline 870.2500 Primary Skin Irritation (3 copies)
- Guideline 870.2600 Dermal Sensitization (3 copies)





United States  
Environmental Protection Agency  
Washington, DC 20460

☒ Registration  
☐ Amendment  
☐ Other

OPP Identifier Number

## Application for Pesticide - Section I

1. Company/Product Number  
42750-~~xx~~ RNA

2. EPA Product Manager  
J. Tompkins

3. Proposed Classification  
☒ None ☐ Restricted

4. Company/Product (Name)  
Acetochlor 4.3 + ATZ 1.7

PM#  
25

5. Name and Address of Applicant (Include ZIP Code)

Albaugh, Inc.  
P.O. Box 2127  
Valdosta, GA 31604-2127

☐ Check if this is a new address

6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. 524-480

Product Name Harness Xtra

## Section - II

☐ Amendment - Explain below.

☐ Resubmission in response to Agency letter dated \_\_\_\_\_

☐ Notification - Explain below.

☐ Final printed labels in response to Agency letter dated \_\_\_\_\_  
☒ "Me Too" Application.

☐ Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

This application is being submitted under the PRIA Fee for Service program as a Class R31 New Product - Non-Fast Track application.

Accordingly, registrant believes the appropriate fee for this application is \$4,000 with 8 month decision timeline.

Please forward invoice to 1-229-244-5841 (fax) and/or e-mail to morrisg@albaughinc.com

## Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging

☐ Yes  
☒ No

Unit Packaging

☐ Yes  
☒ No

Water Soluble Packaging

☐ Yes  
☒ No

2. Type of Container

☒ Metal  
☐ Plastic  
☐ Glass  
☐ Paper  
☐ Other (Specify) \_\_\_\_\_

\* Certification must be submitted

If "Yes" Unit Packaging wgt.

No. per container

If "Yes" Package wgt

No. per container

3. Location of Net Contents Information

☒ Label ☐ Container

4. Size(s) Retail Container

2.5 gl, bulk

5. Location of Label Directions

☒ On label attached to container

6. Manner in Which Label is Affixed to Product

☒ Lithograph  
☐ Paper glued  
☐ Stenciled

☐ Other \_\_\_\_\_

## Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name  
Morris Gaskins

Title  
Registrations Manager

Telephone No. (Include Area Code)  
229-244-3288

## Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature

*Morris Gaskins*

3. Title

Registrations Manager

4. Typed Name

Morris Gaskins

5. Date

4/6/05

6. Date Application Received (Stamped)  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....





United States  
Environmental Protection Agency  
Washington, DC 20460

# Formulator's Exemption Statement (40 CFR 152.85)

## Applicant's Name and Address

Albaugh Inc.  
121 NE 18th St.  
Ankeny, IA 50021

## EPA File Symbol/Registration Number

42750-appl

## Product Name

Acetochlor 4.3 + ATZ 1.7

## Date of Confidential Statement of Formula (EPA Form 8570-4)

April 6, 2005

As an authorized representative of the applicant for registration of the product identified above, I certify that:

### (1) This product contains the following active ingredient(s):

Acetochlor

Atrazine

### (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.

### (3) Indicate by checking (A) or (B) below which paragraph applies:

☒ (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.

### (4) The following active ingredients in this product qualify for the formulator's exemption.

## Source

Active Ingredient	Product Name	Registration Number
acetochlor atrazine		

*\*Product ingredient source information may be entitled to confidential treatment\**

Signature

Name and Title

Morris Gaskins Registrations Manager

Date

4/6/05



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W.  
WASHINGTON, D.C. 20460

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**Certification with Respect to Citation of Data**

Applicant's/Registrant's Name, Address, and Telephone Number Albaugh, Inc. 121 NE 18th St. Ankeny, IA 50021 800-247-8013	EPA Registration Number/File Symbol 42750-xx 1060
Active Ingredient(s) and/or representative test compound(s) acetochlor, atrazine	Date 4/6/05
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) corn	Product Name Acetochlor 4.3 + ATZ 1.7

**NOTE:** If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

☐ I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

**SECTION I: METHOD OF DATA SUPPORT (Check one method only)**

☒ I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

☐ I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).

**SECTION II: GENERAL OFFER TO PAY**

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements]

☒ I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA.

**SECTION III: CERTIFICATION**

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses.

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature <i>Morris Gaskins</i>	Date 4/6/05	Typed or Printed Name and Title Morris Gaskins Registrations Manager
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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**401 M Street, S.W.**  
**WASHINGTON, DC 20460**

Form Approved OMB No. 2070-0060

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**DATA MATRIX**

<b>Date:</b> 4/6/05	<b>EPA Reg. No./File Symbol</b> 42750-appl	Page 1 of 5
<b>Applicant's/Registrant's Name &amp; Address:</b> Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021	<b>Product:</b> <b>ACETOCHLOR 4.3 + ATZ 1.7</b>	

**Ingredient:** Acetochlor CAS # 34256-82-1, Atrazine CAS # 1912-24-9

Guideline Reference	Guideline Study Name	MRID Number	Submitter	Status	Note
830.1550	Product Identity and Composition	With application	Albaugh	OWN	
830.1600	Description of Materials Used to Produce the	With application	Albaugh	OWN	
830.1620	Description of Product Process				Waiver <sup>2</sup>
830.1650	Description of Formulation Process	With application	Albaugh	OWN	
830.1670	Description of Formation of Impurities	With application	Albaugh	OWN	
830.1700	Preliminary Analysis				Not req'd <sup>1</sup>
830.1750	Certified Limits	With application	Albaugh	OWN	
830.1800	Enforcement Analytical Method	With application	Albaugh	OWN	
830.6302	Color	With application	Albaugh	OWN	
830.6303	Physical State	With application	Albaugh	OWN	
830.6304	Odor	With application	Albaugh	OWN	
830.6313	Stability to Normal and Elevated Temperatures, Metals, and Metal Ions				Not req'd <sup>1</sup>
830.6314	Oxidation/Reduction: Chemical Incompatibility	With application	Albaugh	OWN	
830.6315	Flammability	With application	Albaugh	OWN	
830.6316	Explosibility				Waiver <sup>3</sup>
830.6317	Storage Stability				In progress <sup>4</sup>

<b>Signature</b> 	<b>Name and Title:</b> Morris Gaskins Registrations Manager	<b>Date</b> 4/6/05
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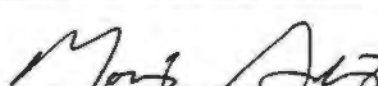
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**DATA MATRIX**

<b>Date:</b> 4/6/05	<b>EPA Reg. No./File Symbol</b> 42750-appl	<b>Page</b> 2 of 5
<b>Applicant's/Registrant's Name &amp; Address:</b> Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021	<b>Product:</b> <b>ACETOCHLOR 4.3 + ATZ 1.7</b>	

**Ingredient:** Acetochlor CAS # 34256-82-1, Atrazine CAS # 1912-24-9

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6319	Miscibility				Waiver <sup>5</sup>
830.6320	Corrosion Characteristics				In progress <sup>4</sup>
830.6321	Dielectric Breakdown Voltage				Waiver <sup>5</sup>
830.7000	pH	With application	Albaugh	OWN	
830.7050	UV/Visible Absorption				Not req'd <sup>1</sup>
830.7100	Viscosity	With application	Albaugh	OWN	
830.7200	Melting Point/Melting Range				Not req'd <sup>1</sup>
830.7220	Boiling Point/Boiling Range				Not req'd <sup>1</sup>
830.7300	Density/Relative Density/Bulk Density	With application	Albaugh	OWN	
830.7370	Dissociation Constants in Water				Not req'd <sup>1</sup>
830.7550	Partition Coefficient (n-octanol/water), Shake Flask Method				Not req'd <sup>1</sup>
830.7560	Partition Coefficient (n-octanol/water), Generator Column Method				Not req'd <sup>1</sup>
830.7570	Partition Coefficient (n-octanol/water), Estimation by Liquid Chromatography				Not req'd <sup>1</sup>

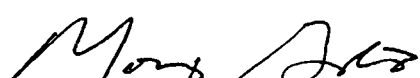
<b>Signature</b> 	<b>Name and Title:</b> Morris Gaskins Registrations Manager	<b>Date</b> 4/6/05
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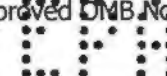
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**DATA MATRIX**

<b>Date:</b> 4/6/05		<b>EPA Reg. No./File Symbol</b> 42750-appl		<b>Page</b> 3 of 5	
<b>Applicant's/Registrant's Name &amp; Address:</b> Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021		<b>Product:</b> <b>ACETOCHLOR 4.3 + ATZ 1.7</b>			
<b>Ingredient:</b> Acetochlor CAS # 34256-82-1, Atrazine CAS # 1912-24-9					
<b>Guideline Reference Number</b>	<b>Guideline Study Name</b>	<b>MRID Number</b>	<b>Submitter</b>	<b>Status</b>	<b>Note</b>
830.7840	Water Solubility: Column Elution Method; Shake Flask Method				Not req'd <sup>1</sup>
830.7860	Water Solubility, Generator Column Method				Not req'd <sup>1</sup>
830.7950	Vapor Pressure				Not req'd <sup>1</sup>
870.1100	Acute Oral Toxicity - Rat	With application	Albaugh	OWN	
870.1200	Acute Dermal Toxicity - Rat	With application	Albaugh	OWN	
870.1300	Acute Inhalation Toxicity - Rat	With application	Albaugh	OWN	
870.2400	Primary Eye Irritation - Rabbit	With application	Albaugh	OWN	
870.2500	Primary Dermal Irritation	With application	Albaugh	OWN	
870.2600	Dermal Sensitization	With application	Albaugh	OWN	
<b>Signature</b> 			<b>Name and Title:</b> Morris Gaskins Registrations Manager		<b>Date</b> 4/6/05

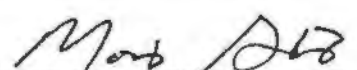
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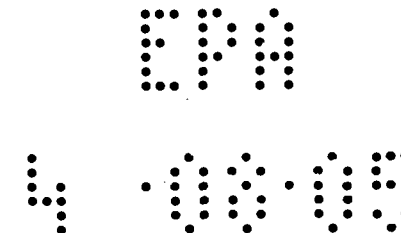


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**DATA MATRIX**

<b>Date:</b>		<b>EPA Reg. No./File Symbol</b> 42750-appl		Page 4 of 5	
<b>Applicant's/Registrant's Name &amp; Address:</b> Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021		<b>Product:</b> <b>ACETOCHLOR 4.3 + ATZ 1.7</b>			
<b>Ingredient:</b> Acetochlor CAS # 34256-82-1, Atrazine CAS # 1912-24-9					
<b>Guideline Reference Number</b>	<b>Guideline Study Name</b>	<b>MRID</b>	<b>Submitter (EPA Co. No.)</b>	<b>Status</b>	<b>Note</b>
<b>Acetochlor generic data requirements</b>					
Albaugh satisfies the generic data requirements for Acetochlor under Formulator's Exemption					
<b>Signature</b> 			<b>Name and Title:</b> Morris Gaskins Registrations Manager		<b>Date</b> 4/6/05





Footnote 1

- 830.1700 Preliminary Analysis
- 830.6313 Stability to Normal and Elevated Temperature, Metals, and Metal Ions
- 830.7050 UV/Visible absorption
- 830.7200 Melting Point/Range
- 830.7220 Boiling Point/Range
- 830.7370 Dissociation Constants in Water
- 830.7550 Partition coefficient
- 830.7560 Partition coefficient
- 830.7570 Partition coefficient
- 830.7840 Water solubility
- 830.7860 Water solubility
- 830.7950 Vapor Pressure

This data is not required for end use products per Product Properties Test Guidelines OPPTS 830.1000 (e)(2)(xi)(B) Table 2

Footnote 2

- 830.1620 Production Process . Albaugh requests a waiver for this data requirement. ACETOCHLOR 4.3 + ATZ 1.7 product is formulated. See Guideline 830.1650.

Footnote 3

- 830.6316 Explodability. Albaugh requests a waiver for this data requirement. ACETOCHLOR 4.3 + ATZ 1.7 product is not composed of explosive components and therefore does not exhibit explosive characteristics.

Footnote 4

- 830.6317 Storage stability
- 830.6320 Corrosion characteristics

Albaugh is currently conducting combined testing for these guidelines as allowed by OPPTS Product Properties Test Guidelines. Albaugh will submit these studies upon completion of the Storage Stability one year after initiation and requests that a conditional registration be granted prior to submission of the data.

Footnote 5

- 830.6319 Miscibility. Albaugh requests a waiver for this data requirement. ACETOCHLOR 4.3 + ATZ 1.7 is not intended to be diluted with oil or other non-polar solvents.

Footnote 6

- 830.6321 Dielectric breakdown voltage. Albaugh requests a waiver for this data requirement. ACETOCHLOR 4.3 + ATZ 1.7 is not labeled or intended for use around electrical equipment.

FOR OFFICIAL USE ONLY

FILE SYMBOL

42750-RNA

REGISTRATION NO.

## CONFIDENTIAL STATEMENT OF FORMULA ENCLOSED

DATE SUBMITTED	SUBMITTED BY (✓)	
	APPLICANT	BASIC SUPPLIER
4/8/05		

**Do Not Write Comments,  
Formula, or Parts of Formula  
on This Envelope**

### NOTE

It shall be unlawful—for any person to use for his own advantage or to reveal, other than to the Secretary, or officials or employees of the United States Department of Agriculture or other Federal agencies, or to the courts in response to a subpoena, or to physicians, and in emergencies to pharmacists and other qualified persons, for use in the preparation of antidotes, in accordance with such directions as the Secretary may prescribe, any information relative to formulas of products acquired by authority of Section 4 of the "Federal Insecticide, Fungicide, and Rodenticide Act."



